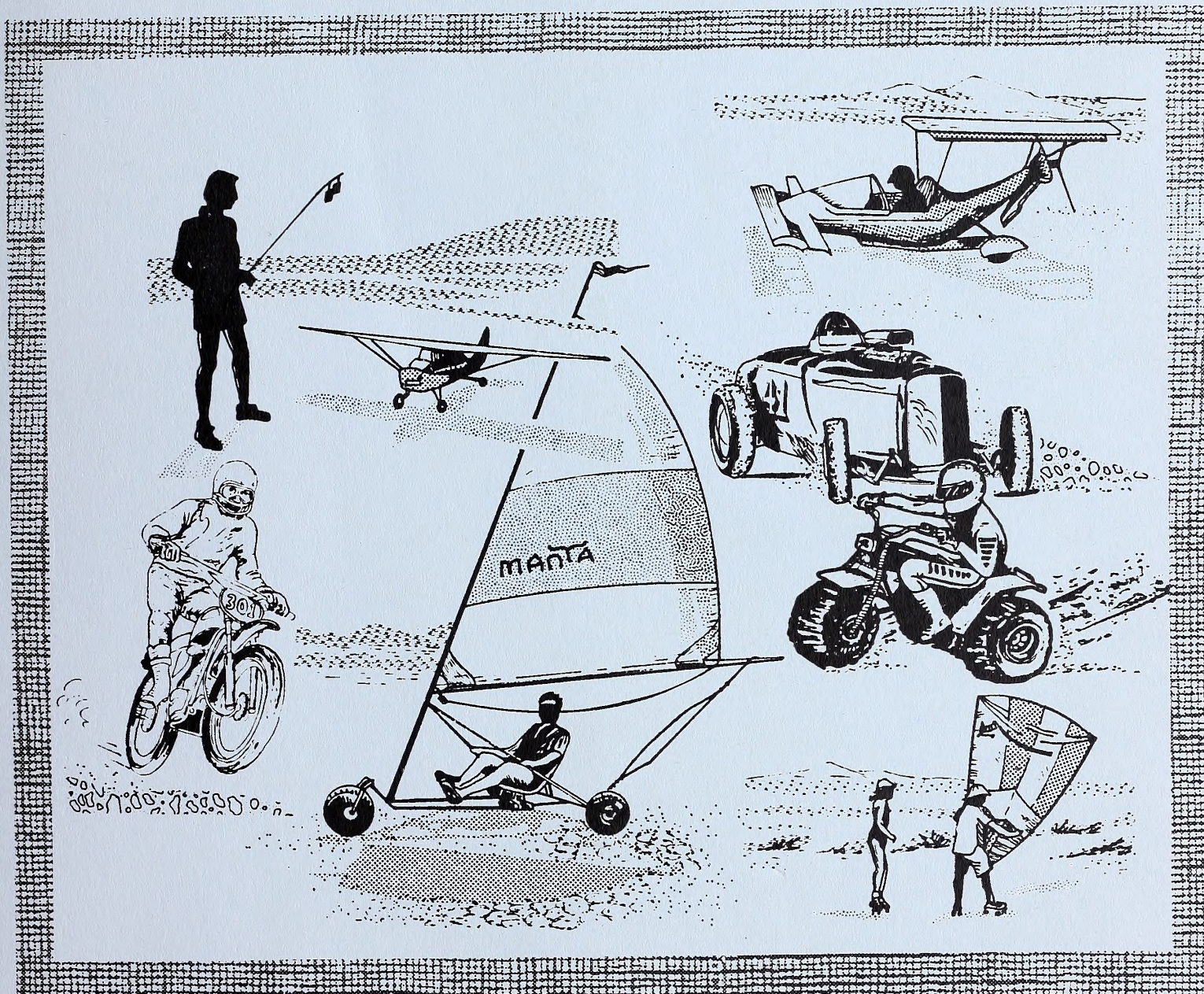




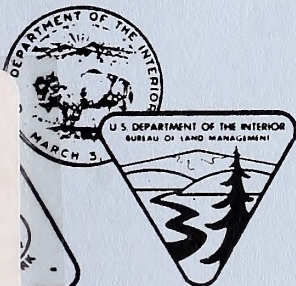
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MANAGEMENT PLAN FOR EL MIRAGE Cooperative Management Area



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Barstow Resource Area
California Desert District
Bureau of Land Management
U.S. Department of the Interior

January, 1990

Decision Record

Management Plan For The El Mirage Cooperative Management Area

Proposed Action

The proposed action is approval and implementation of the Management Plan for the El Mirage Cooperative Management Area.

Prepared by:

Outdoor Recreation Planner
Barstow Resource Area
Bureau of Land Management

Date

Reviewed by:

Environmental Coordinator
Barstow Resource Area
Bureau of Land Management

Date

Recommendation

We have reviewed the Management Plan for the El Mirage Cooperative Management Area and Environmental Assessment, and find that this land use proposal is technically adequate and that consideration has been given to all resource values. We recommend the plan and the mitigating measures stipulated in the environmental assessment as the decision of the Bureau of Land Management on the proposed action.

Recommended by:

El Mirage Project Manager
Barstow Resource Area
Bureau of Land Management

Date

THE UNIVERSITY OF CHICAGO

DEPARTMENT OF THE HISTORY OF ARTS AND ARCHITECTURE

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Recommended by:

Chief, Resource Operations Staff
Barstow Resource Area
Bureau of Land Management

Date

Chief, Visitor Services Staff
Barstow Resource Area
Bureau of Land Management

Date

Chief Area Ranger
Barstow Resource Area
Bureau of Land Management

Date

Decision

I have reviewed the El Mirage Cooperative Management Area Management Plan and Environmental Assessment. I find that this land use proposal reflects the concerns of the involved parties, and presents the most responsible use of the resources available. I approve the plan and mitigating measures stipulated in the Environmental Assessment as the decision of the Bureau on the proposed action.

Approved by

Area Manager
Barstow Resource Area
Bureau of Land Management

Date

Rationale

The management plan reflects several years of planning effort coordinated among the residents living in the affected area, the recreational and commercial interest using the area, and the various government entities responsible for management of

EL the area. This plan proposes long range solutions to the issues identified and represents a win win solution for the parties involved.

A majority of the issues revolve around the recreational use of land. Recreational visitors want some land to ride off highway vehicles on. Private landowners do not want the use on their land or near their homes. This plan provides a solution for the concerns of the landowners and the visitors. Undeveloped private lands will be acquired, combined with existing federal lands, and fenced to contain use within a managed area and away from residences.

Concurrence

The following parties, as the cooperators to the El Mirage Cooperative Management Area, concur with the actions contained in the management plan.

Director
San Bernardino County
Regional Parks Department

Date

Director
Department of Parks and Recreation
County of Los Angeles

Date

Chairman
California OHMVR Commission

Date

Deputy Director
OHMVR Division

Date

the area. This area was found to be suitable for the
purpose of the project and was accordingly reserved for the
purpose of the project.

A survey of the area was made and the following was
found. The area was found to be suitable for the
purpose of the project and was accordingly reserved for the
purpose of the project.

CONCLUSIONS

The following conclusions were reached by the committee in its
report. The area was found to be suitable for the
purpose of the project and was accordingly reserved for the
purpose of the project.

Director
San Bernardino County
Regional Police Department

Director
Department of Parks and Recreation
County of Los Angeles

Director
California State Commission

Director
County of Los Angeles

EL MIRAGE MANAGEMENT PLAN OUTLINE

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I. INTRODUCTION

A. PURPOSE

The purpose of this Management Plan is to establish goals and actions to protect the public's recreational opportunities at the El Mirage Cooperative Management Area within a multiple-use context, while protecting adjacent land consistent with applicable County General Plans. The plan will confirm boundaries for the Management Area; identify the lands to acquire; and state the priorities for acquisition. It will also identify the scope and location for facilities and establish the guidelines for visitor services.

A Management Plan for the El Mirage Cooperative Management Area is in response to the findings of the *El Mirage/Shadow Mountains Feasibility Study*, 1985, and *A Proposal To Establish The El Mirage Special Recreation Area*, 1986. The cover letter on the feasibility report states "...as a long-term solution, that a managed area be established. The managed area would provide for multiple-uses including recreation, mining, commercial filming, and sheep grazing." The proposal confirmed these findings and went on to define "...what agencies should manage the area, and from what sources funding should be sought." The recommendations from these two documents were refined in preparing the Management Plan.

Henceforth the terms El Mirage Cooperative Management Area and the terms Management Area will be used synonymously.

B. LOCATION AND SETTING

The El Mirage Cooperative Management Area is located in the western Mojave Desert, 25 miles northwest of Victorville, and 30 miles east of Lancaster. The area is situated in the northwestern portion of San Bernardino County, seven miles south of Edwards Air Force Base between the Los Angeles County line and Highway 395. El Mirage can be reached from the city of San Bernardino in approximately one hour by traveling north on I-15 and Highway 395. The Management Area is located approximately 100 road miles from the Los Angeles area, 60 road miles from the Riverside area, and 160 road miles from the San Diego area.

See Illustration 1 for a general location map. See Illustration 2 for the boundary of the El Mirage Cooperative Management Area and the zone of influence. The zone of influence recognizes an area from one to five miles wide surrounding the Management Area that will be indirectly impacted from the management actions within

the Management Area. When referenced in this plan, the zone of influence does not include the Management Area.

The Management Area is located in the mid-west region of the Mojave Desert. This region of the desert has an evaporation rate greater than the total amount of rainfall. Summers are usually hot and dry; the winters are usually cold and dry. Strong gusty winds blow frequently. Landscape within the Management Area consists of a dry lakebed with mountains to the north and east, between is a broad sloping bejada. The area has a consistent vegetative covering with the dominant species being Joshua trees and creosote bush. The area is populated by numerous birds and small animals typical of the high desert.

Please refer to Appendix A, *Resource Data*, for more detailed information on resources and their uses within the Management Area and the zone of influence.

C. PREVIOUS STUDIES AND PLANS

The San Bernardino County Regional Parks Department conducted a study of recreational use on El Mirage Dry Lake during the early 1970s and concluded that the majority of visitors were from surrounding counties and that funding for a managed area would be prohibitive. Subsequent inquiries to their office indicated that the County Park System would not be interested in managing a designated area at El Mirage.

During 1973, the California Department of Parks and Recreation, Off-Highway Motor Vehicle Recreation (OHMVR) Division conducted a study of El Mirage Dry Lake. In a preliminary report titled *El Mirage Dry Lake*, the Department presented seven possible management alternatives. The report concluded it was not feasible for the State to manage the area due to low user interest, and also because "the uses carried on there are not consistent with or related to OHV (off-highway vehicle) users who are registered under this program (California Off-Highway Vehicle Green Sticker Program)."

In 1980, the BLM issued *The California Desert Conservation Area (CDCA) Plan* which established broad guidelines for managing the public lands within the California Desert District. Public land located on El Mirage dry lake was classified as "open" to OHV use. This was an acknowledgement of the value of the resources in the El Mirage area to recreationists. However, several issues such as trespass, and the health and safety of visitors, were left unresolved.

The surrounding public lands in the Shadow Mountains were unclassified in the CDCA Plan, indicating an intention to dispose of these lands. The scattered land ownership pattern and the intensity of existing motorized and unmotorized recreational use

CALIFORNIA DESERT CONSERVATION AREA

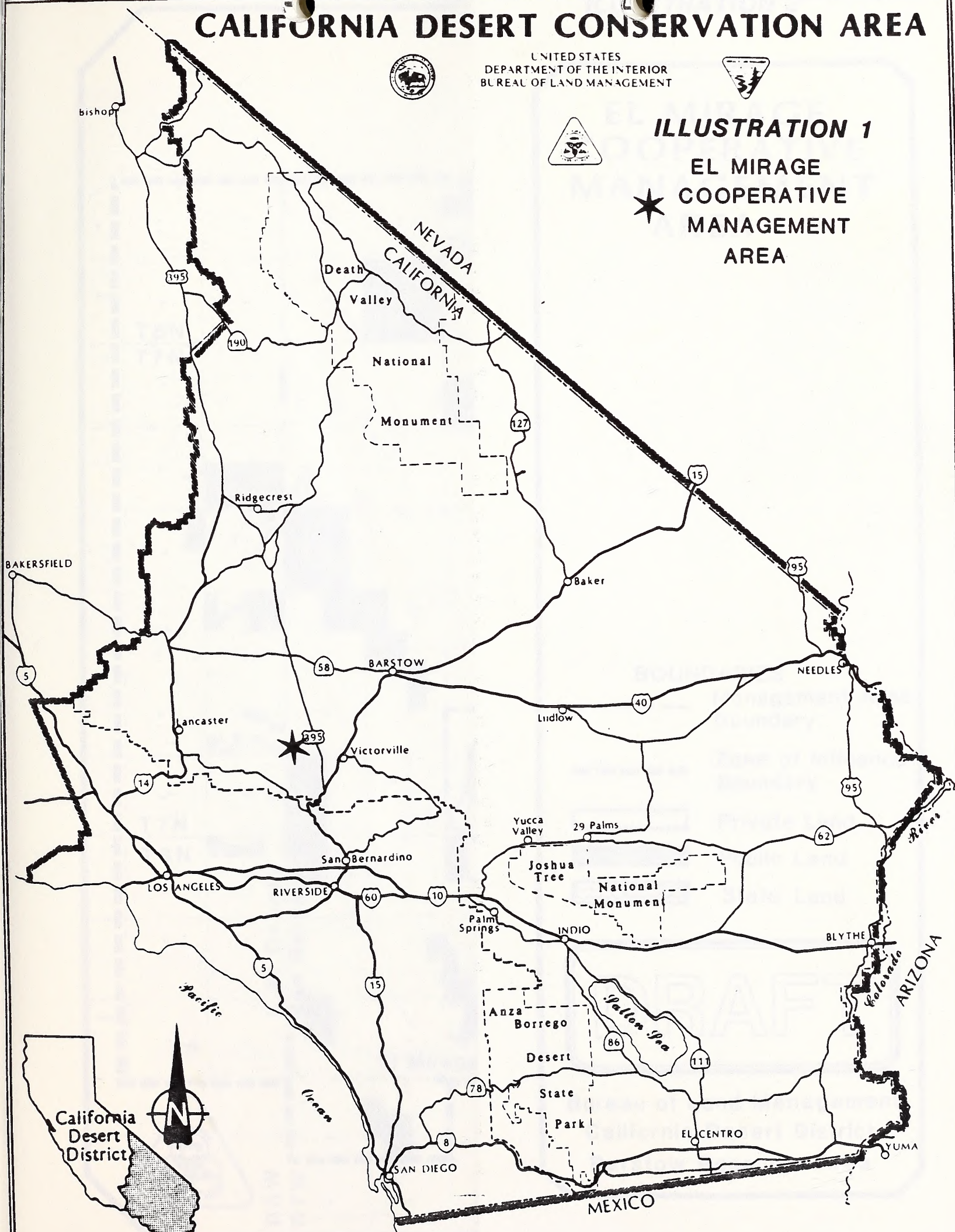


UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT



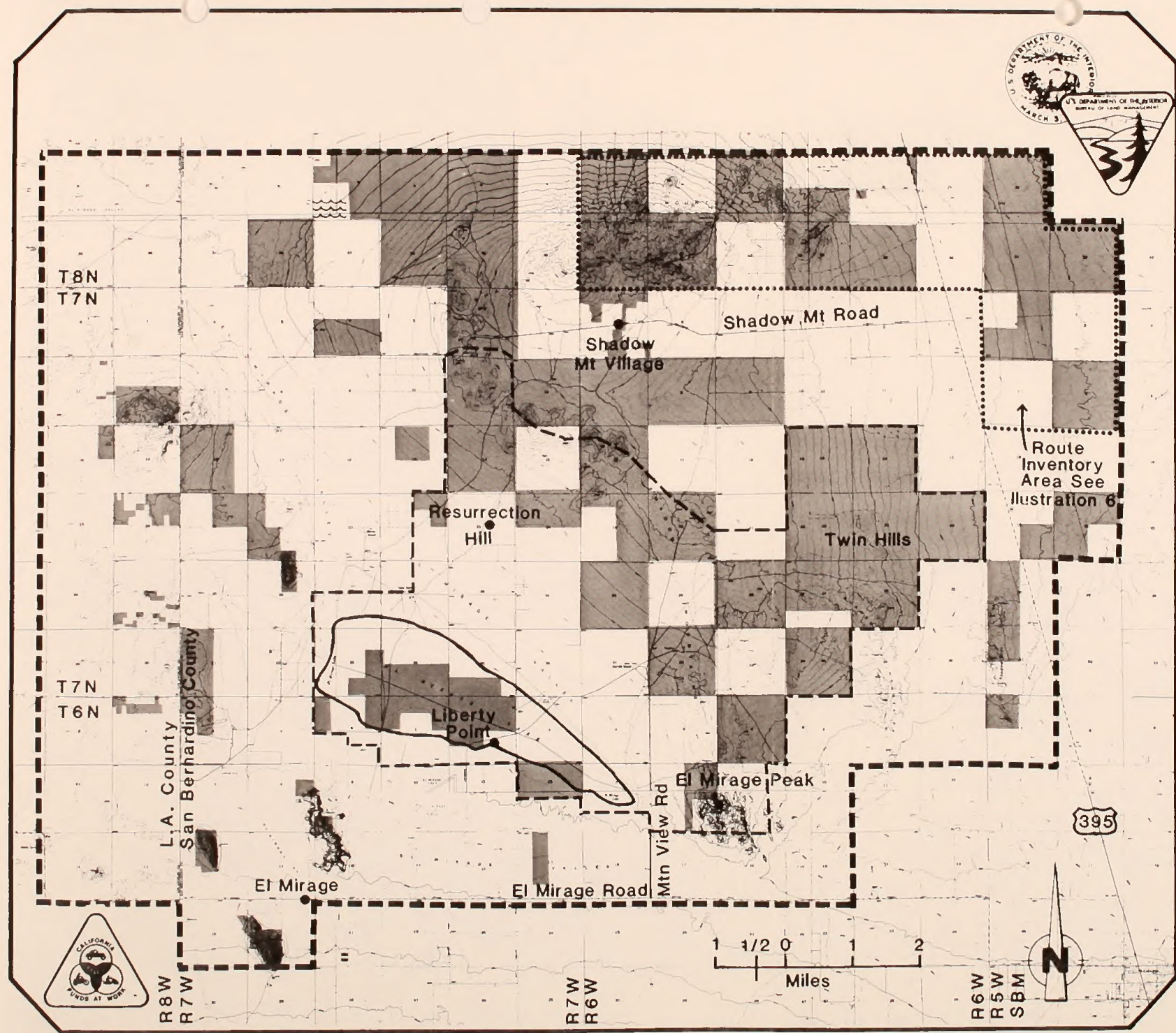
ILLUSTRATION 1

★
EL MIRAGE
COOPERATIVE
MANAGEMENT
AREA



CALIFORNIA DESERT CONSERVATION AREA





EL MIRAGE COOPERATIVE MANAGEMENT AREA

- BOUNDARIES**
- Management Area Boundary
 - ... Zone of Influence Boundary
 - Private Land
 - Public Land
 - State Land

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Bureau of Land Management
California Desert District
Barstow Resource Area



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made the El Mirage/Shadow Mountain area extremely difficult for the BLM to manage. In the early 1980s, BLM indicated a willingness to transfer the public lands within the El Mirage dry lake area to some other agency which might be able to provide the appropriate levels of intensive management.

In 1981, the California Department of Parks and Recreation undertook another study of the El Mirage/Shadow Mountain area. Conclusions reached in the *El Mirage-Shadow Mountains Preliminary Study* indicated that the area "...should continue to be used as a motorized vehicular recreation area". The report stressed that, if the area were to be managed as such, a buffer zone would be necessary. The report also identified a potential problem with using OHV funds for management of an area which was used by vehicles ineligible for the fund. The report concluded that "...continued recreational use of the El Mirage area will benefit people from throughout the state, as well as protect other areas of the southern desert region from the problems associated with unmanaged use."

As a result of the 1981 Preliminary Study conducted by the California Department of Parks and Recreation, the BLM subsequently applied for and received a grant from the OHV Green Sticker Fund for interim management of the El Mirage/Shadow Mountain area. The grant was for \$288,700 over a three year period, ending in September 1986. The intent of the grant was to provide interim management (and stability) to the area until a feasibility study could be completed and a long-term management program defined.

The *El Mirage/Shadow Mountain Feasibility Study* was prepared by a Workgroup composed of local residents and representatives from the various user groups. The Study was published in 1985 and concluded that a formally managed multi-use recreation area should be established. This study documented that over 85% of visitors to the area use vehicles that are required to be registered under the California OHV Green Sticker Program. As a response to this feasibility study, BLM prepared *A Proposal to Establish the El Mirage Special Recreation Area (1986)*. This proposal presented solutions relative to resolving the two basic issues of trespass and health and safety.

In 1988, an Interagency Agreement was signed that officially established the El Mirage Cooperative Management Area as a joint venture among San Bernardino and Los Angeles Counties, the State of California, the Off Highway Motor Vehicle Recreation Commission, and the BLM.

D. THE PUBLIC INTEREST AND EL MIRAGE

In the 1930s a group of automotive racing enthusiasts selected El Mirage dry lakebed as the site to hold monthly events where they

could attempt to set world land speed records. In the ensuing years the number of participants and spectators grew as the automobile became more popular. As a result of this historic use, El Mirage became a very popular recreational site with the population of Southern California. To date, the use of El Mirage includes the original historic user group now organized as the Southern California Timing Association, plus numerous other recreational pursuits.

Recreational use statistics have been collected for the Management Area by BLM personnel for several years. Visitor counts have been compiled from aerial counts and vehicle patrols. Current estimated recreation use is 110,000 visits per year.

The most popular use occurring within the Management Area involves the use of off-highway vehicles. Other activities include the recreational use of landsailors, ultralights, para-sails, kites, sail-skates, gyrocopters, model airplanes, model rockets, hang-gliders, and sight-seeing. The El Mirage Cooperative Management Area is a place where visitors can engage in almost any recreational activity of their choice.

A spin-off from the exposure El Mirage has received as a recreation site is an increase in applications for commercial use. The most intensive commercial use the area receives is from the film industry. The area is also popular with numerous firms engaged in product testing or research and development.

Throughout the years, as overall use of the lakebed area increased, the community of El Mirage has remained a tolerant host. Residents have endured a steady stream of motorhomes and filming trucks driving down their private roads as the public has sought access to the lakebed. In times of need the residents have provided shelter and first aid for lost and injured visitors. The communities of Shadow Mountain Village and (to some degree) Adelanto have reacted in a similar manner.

Public interest has remained intense concerning the use and management of the dry lakebed and surrounding area. A Workgroup composed of local residents, landowners, and visitors continues to serve as a sounding board for both the day-to-day and long term operation of the Management Area.

E. MAJOR ISSUES

The Management Area is a result of the efforts by several parties to resolve issues brought to the forefront by a variety of groups. Issues were identified at public meetings and involved input from user groups, landowners, adjacent residents, the Workgroup, as well as the general public. The following is a list of the major issues that this Management Plan will address:

- 1) OHV trespass and associated impacts such as trail proliferation, noise, dust, visual pollution, crop damage, and traffic congestion on private roads are excessively degrading to the environment and disturbing to the local residents.
- 2) Safety hazards such as open vertical mine shafts, road/trail washouts, holes in the lakebed, car bodies, worm tracks, trash on the lakebed, unlimited speed, etc., are causing personal injury, and property and resource damage.
- 3) Currently there is no guaranteed public access to El Mirage dry lake. This results in a trespass situation. The main access route is a rough and dusty road causing some visitors to avoid using it.
- 4) Litter (i.e., broken glass, scrap metal, nails, and dirty diapers) is unsanitary, unsightly, and poses a health and safety hazard to visitors of the area.
- 5) Sewage dumped from recreational vehicle holding tanks along routes of travel poses a health hazard to visitors and residents.
- 6) The lack of facilities, such as water and restrooms, limits the use of the Management Area for extended periods to those visitors with self-contained camping equipment.
- 7) The discharge of weapons (i.e., rifles, pistols, shotguns, and black powder) creates a safety hazard and results in an accumulation of trash and destroyed targets.
- 8) The various recreation activities occurring on the lakebed, both organized and unorganized, sometimes conflict with one another.
- 9) Adverse OHV user patterns such as riding OHVs on county maintained roads, riding on the lakebed when it is wet, circle racing, and the creation of "poof" dust courses are either illegal or destructive to the environment.

- 10) Commercial use, such as research and development, product testing, commercial photography, and vending, often occurs unauthorized, and sometimes in conflict with other users (commercial and recreational).
 - 11) As a result of the rural nature of the El Mirage area, the influx of recreational visitors often creates excessive demands upon the areas emergency services.
 - 12) Uncontrolled and uneducated public use of the Management Area is resulting in an unacceptable degradation of the natural resource base.
-

II MANAGEMENT FOCUS

A. MANAGEMENT GOALS

This plan identifies the actions necessary to create and manage the El Mirage Cooperative Management Area during the next ten years, 1990-1999. The criteria used in developing the goals to guide the plan are outlined in the CDCA Plan, Bureau Policy, and State and Federal law. The following goals focus the management effort toward resolving the issues concerning public use of the El Mirage/Shadow Mountain Area. The goals are not listed in order of priority; they are all critical to the success of the Management Area.

- 1) Manage the setting in the El Mirage Cooperative Management Area for intensive outdoor recreation--allowing for the widest variety of activities possible--free from restrictive zoning.
- 2) Manage non-recreation activities to allow for the greatest variety of such uses as long as they result in minimal conflicts with recreational visitors.
- 3) Manage the lakebed surface to maintain its smooth condition, historical acreage, historical shoreline, and to provide unobstructed open space.
- 4) Mitigate impacts to the natural resource base within the boundaries of the Management Area to sustain long-term recreation use.
- 5) Involve the local residents and visitors in the day-to-day management of the area.
- 6) Provide sufficient visitor services within the Management Area and the zone of influence to ensure the health and safety of visitors, to enforce the law (relative to recreation activities), and to disseminate information necessary to achieve management goals.
- 7) Provide a minimal infrastructure of roads, facilities, and communications to provide the most basic visitor services.
- 8) Consolidate land within the Management Area into public ownership to eliminate the trespass situation, to provide access, and to enable BLM to effectively manage uses within a multiple-use context.

B. MANAGEMENT CONSTRAINTS/ASSUMPTIONS

This Management Plan addresses the issues identified by the involved public. However, the management actions must be consistent with previous BLM planning efforts and the applicable County, State and Federal laws. This consistency requirement resulted in the following constraints/assumptions:

- (1) The CDCA Plan (1980, as amended) establishes the overall direction and guidance for management of the CDCA, which includes the El Mirage Cooperative Management Area. All actions of this plan will be consistent with, or will amend, the CDCA Plan.
- (2) An Interagency Agreement (1988) established the El Mirage Cooperative Management Area as a joint venture among the five parties to the agreement. This agreement defines roles and responsibilities for each of the signatories to the agreement.
- (3) Acquisition and development will be consistent with the provisions of the State Department of Parks and Recreation, Off Highway Motor Vehicle Recreation Division.
- (4) The El Mirage Cooperative Management Area will be managed under the principles of multiple-use, including but not limited to such activities as recreation, mining, grazing, and commercial filming.
- (5) The Management Plan overall addresses uses on both public and private lands. It is recognized that many of the actions proposed within the Management Area cannot be implemented until the private land is acquired into public ownership. Management actions within the zone of influence will be consistent with applicable laws regarding the rights of private landowners and the objectives of neighboring communities.

III. MANAGEMENT PROGRAM

A. ACQUISITION, AND DESIGNATIONS AFFECTING LAND STATUS

Access

- 1) *Acquire the following rights-of-way for the access roads into the Management Area: 1) from El Mirage Road to the main entrance, (Mountain View Drive, approximately 1 mile), 2) from Highway 395 to the eastern entrance (an unidentified route), and 3) from Old El Mirage Road to the western entrance (approximately .5 mile).*

Discussion: Currently there is no permanent legal access into the Management Area. The BLM has been maintaining Mountain View Road as the primary access route since 1985 with the permission of the affected landowners. This has served as a temporary solution to provide access into the Management Area. A right-of-way will provide permanent public access to the main entrance of the Management Area.

The long-term solution for the eastern entrance is an access road to enter/exit HWY 395 near the southeast corner of section 24, T.7N., R.6W., SBM. The final design/location of the east entrance is dependent upon Caltrans making improvements to HWY 395; i.e., 2 lanes converted to 4, including acceleration lanes, deceleration lanes, and turn lanes.

Dependant upon the time table for this improvement to HWY 395, there may be a need for traffic to temporarily enter/exit HWY 395 one mile north of the proposed entrance. The location of this temporary access route takes into consideration vehicle safety hazards due to the rolling topography of existing HWY 395.

A right-of-way is also necessary to guarantee access on an existing connector route from the western entrance to Old El Mirage Road. Using this route as the western access will require the least amount of road work to establish the primary road network to, and within ,the Management Area.

Acquisition

- 2) *Initiate a land acquisition program (involving the donation, purchase, condemnation and/or exchange of land) to convert approximately 12,000 acres of private land to public land in five years.*

Discussion: Adjusting the land tenure, and confining use within the boundaries by a barrier, will resolve several of the major issues. This will reduce trespass and associated problems, while creating a land status situation favorable for resource and visitor management.

San Bernardino County, as per the Interagency Agreement (1988) for the Management Area, will serve as the acquisition agent. The county will acquire the land in accordance with the acquisition guide for the State of California, Department of Parks and Recreation, Grant Programs, dated February 1989. Land will be appraised at fair market value. Acquired lands will be transferred to the BLM.

See Illustration 3 for the private land to be acquired as well as the priorities for acquisition. This is a tentative schedule, the actual acquisition will be dependent on fluctuations in the realty market. The largest parcels within each of the priority areas will be acquired first. Land acquisition will be an on-going process using the following steps to attain ownership/use of the land:

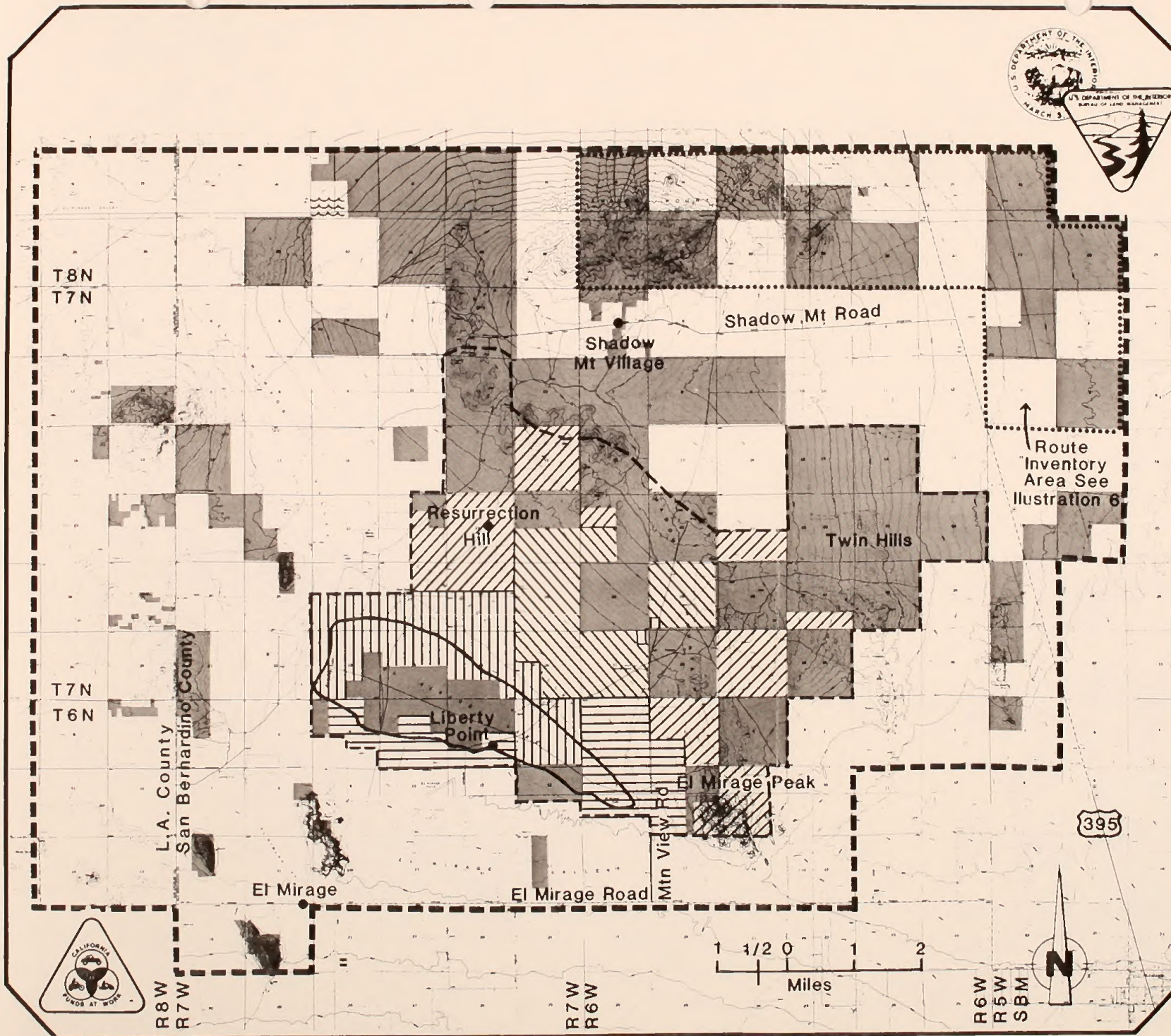
- (a) Seek donation of private parcels.
- (b) Acquire tax delinquent parcels.
- (c) Purchase from willing landowners.
- (d) Exchange with willing landowners, for tracts of land greater than 640 acres.
- (e) Exercise the right of eminent domain.
- (f) Seek use agreements for private land.

Landowners may donate their land to the Management Area and will be encouraged to do so. Such donations will be appropriately recognized. Acquired land will be purchased at fair market value. Exchanges will be considered when a landowner owns parcels that exceed 640 acres. The focus for such exchanges will be on unclassified public land within the zone of influence (see Illustration 2).

If landowners are not willing to sell at fair market value, San Bernardino County will exercise the right of eminent domain according to standard county procedures. In the event that acquisition funds become limited in the future, use agreements will be sought for private land within the Management Area.

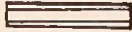



Consistent with BLM policy both the surface and subsurface estate will be acquired where possible. Any existing claims will be subject to validation.

- 3) *Acquire parcels outside, but adjacent to, the Management Area that become available through donations, tax default, or exchanges, if they increase the recreation value of the Management Area and do not conflict with the interest of bordering communities.*

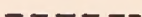

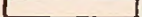




EL MIRAGE COOPERATIVE MANAGEMENT AREA

LAND STATUS AND ACQUISITION PRIORITY

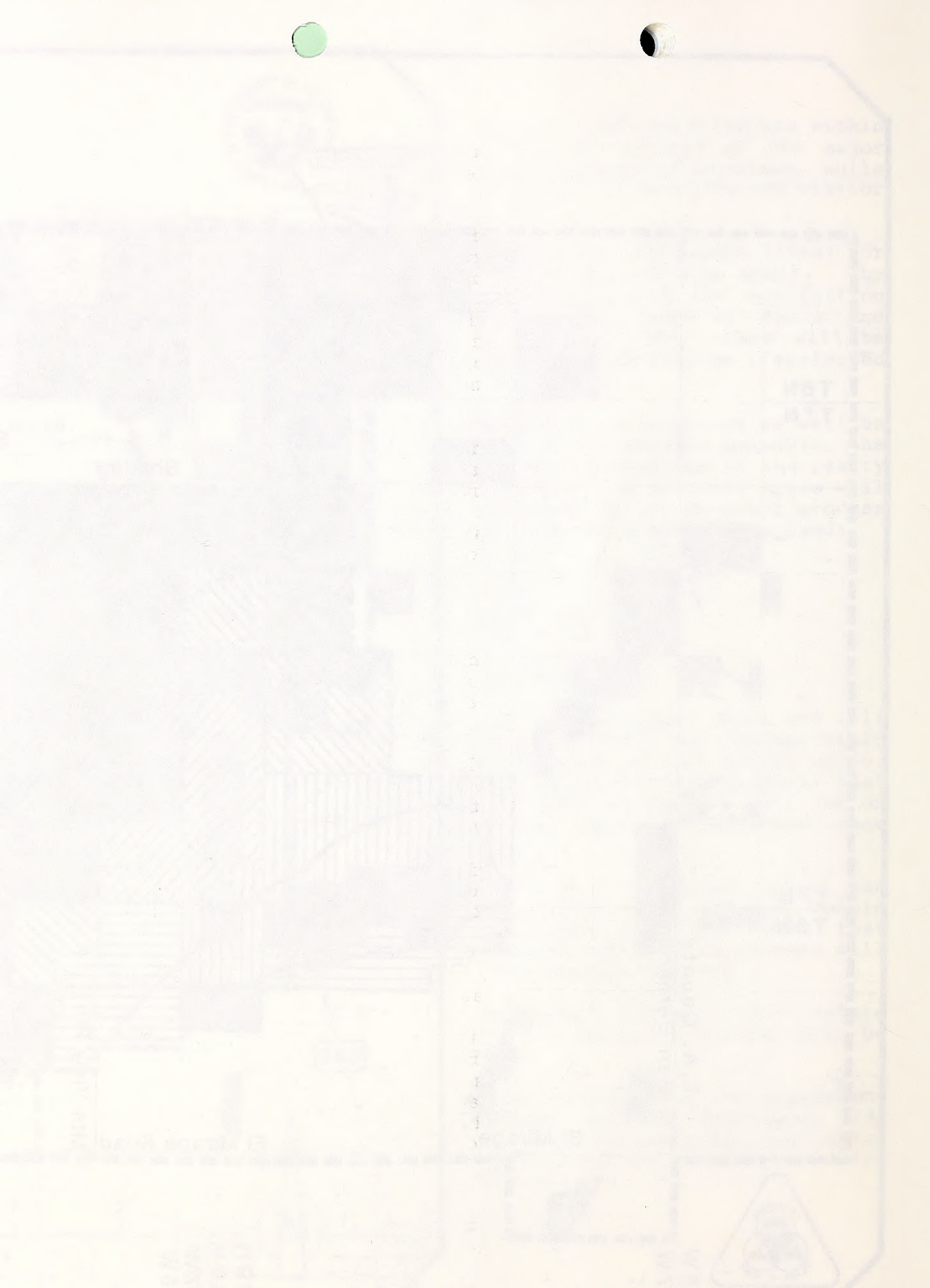
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-  Second Phase
-  Third Phase
-  Fourth Phase

BOUNDARIES

-  Management Area Boundary
-  Zone of Influence Boundary
-  Private Land
-  Public Land
-  State Land

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Bureau of Land Management
California Desert District
Barstow Resource Area



Discussion: Opportunities may exist to acquire parcels of private land adjacent to the Management Area at a very low cost. Doing so will increase the recreation opportunities within the Management Area.

- 4) *Acquire the central inholding at the end of the initial 5 year acquisition program, provided there is funding and recreational use warrants such acquisition.*

Discussion: A determination will be made approximately three years into the land acquisition program as to whether or not it is viable to acquire the central inholding. Specific information will be available at that time concerning acquisition costs and recreation use levels.

The original scoping for the Management Area concluded that the Management Area was viable with a large central inholding. This remains valid, however, the central inholding represents a large portion of the El Mirage Valley. Acquiring this inholding will greatly increase the amount of land available for recreation use, reduce long-term crowding and congestion, and increase visitor safety.

Inholding Management

- 5) *Manage the public lands around the central inholding (until acquired), to reduce OHV trespass within the central inholding while at the same time allowing the landowners free access to their land.*

Discussion: The central inholding is not scheduled to be acquired during the first five years of land acquisition, therefore, all recreation activity will be excluded from private land with the exception of use by the legal landowners.

The central inholding perimeter will be signed: Leaving Open Area. Trespass laws will be enforced in the central inholding. Landowners will be allowed unrestricted access to their land.

To the extent that implementation of this management action becomes impossible, it may be necessary to fence the perimeter of the inholding or obtain recreation use agreements with landowners.

Inholding landowners, their relatives, friends, and guests, must all pay entrance fees if they operate recreational vehicles within the Management Area, or if they engage in, or observe recreational activities at any location other than on their own property. Landowners operating OHV recreational vehicles within the central inholding are subject to compliance with all appropriate local and state trespass laws.

CDCA Plan Amendments

- 6) *Classify as multiple use class (MUC) "I" (intensive) and vehicle access designation "open" all existing public land within the Management Area, and all land that is acquired in the future.*

Discussion: The success of the Management Area hinges upon the ability to contain use within the Management Area. The CDCA Plan will be amended to reflect the management actions contained in this plan. The amendments primarily reflect a change in multiple-use classes (from unclassified to classified) and corresponding changes in vehicle access designations (Illustration 4).

All public land within the Management Area is classified in accordance with the goal of providing for multiple use-management, including intensive OHV play. The public land within the zone of influence, however, will either be closed to vehicle use or access will be limited to designated routes of travel through the route designation process. Land closures will be periodically reviewed to determine if such closures are still warranted. If not warranted, these closures will be removed and the lands will be made available for use after completion of route designation.

The assumption has been made that all potential problem areas, relative to inappropriate OHV play, are within the zone of influence. The area north of the zone of influence and south of Edward AFB will be closely monitored to assure that this assumption is correct.

- 7) *Classify as MUC "M" (moderate) and vehicle access designation "closed", the public land within the following sections which are within the zone of influence north of the Management Area, and south, and west of Shadow Mountain Village:*

Location:

T.7N. R.6W. Secs. 7, 8, and 18;

T.7N. R.7W. Secs. 2, 12, and 13;

T.8N. R.7W. Secs. 26, 27, 28, 34, and 35.

Discussion: It was determined that these 5,600 acres (approximately) would be held in public ownership (rather than being unclassified and available for disposal) to more effectively control existing trespass and inappropriate OHV use patterns. The vehicle access designation of "closed" will prevent OHV play in this area. The necessity for vehicle access designation of "closed" will be reviewed on a yearly basis.

Public land with the vehicle access designation of "closed" will be signed as such along the perimeter of the closed area. Any appropriate internal access routes in these areas will also be signed.



EL MIRAGE COOPERATIVE MANAGEMENT AREA

PLAN AMENDMENTS



MUC Intensive
VAD Open
MUC Moderate
VAD Closed
MUC Unclassified
VAD Closed
MUC Unclassified
VAD Determined
Through Route
Designation
Process

MUC = Multiple Use Class

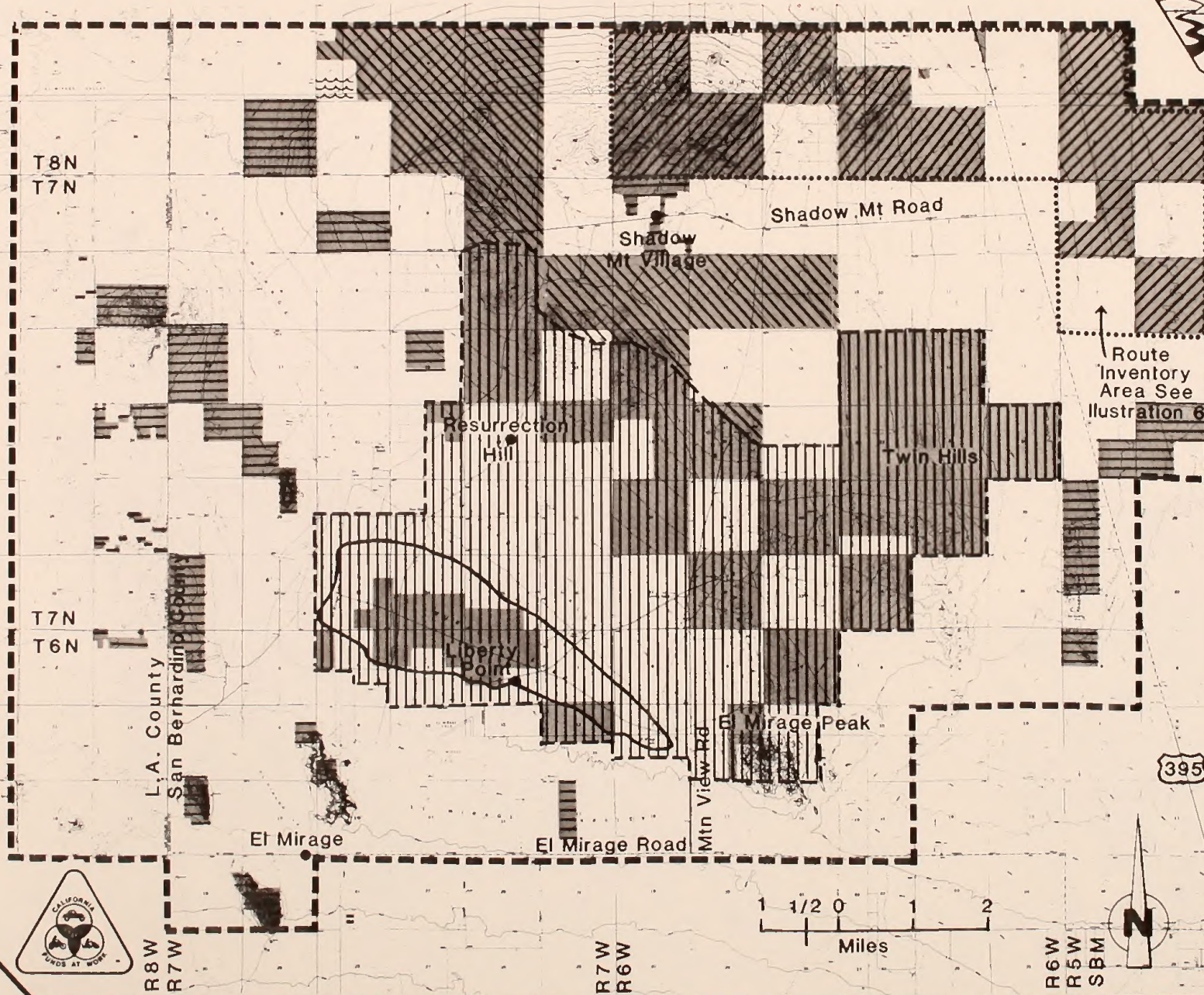
VAD = Vehicle Access
Designation

BOUNDARIES

--- Management Area
Boundary
--- Zone of Influence
Boundary
Private Land
Public Land
State Land

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Barstow Resource Area





The location of the northern boundary of the Management Area is a result of an agreement reached in 1985 among the residents of Shadow Mountain Village, the user groups of the El Mirage area, and the BLM. Central to this agreement was the understanding that OHV play would not be allowed within the Shadow Mountain Valley. This action implements that agreement.

- 8) *Classify the vehicle access designation "closed", for the public land within the following sections, which are within the zone of influence and east, south, and west of the Management Area (MUC to remain unclassified).*

Location: San Bernardino Base Line Meridian (SBM),

*T.6N., R.5W., Sec. 6;
T.6N., R.7W., Secs. 9, 13, 18, 19, 20;
T.6N., R.8W., Sec. 1;
T.7N., R.5W., Secs. 6, 8, 19, 20, 30, 31;
T.7N., R.6W., Secs. 6 (Shadow Mtn. Village);
T.7N., R.7W., Secs. 14, 15, 18, 19, 20, 29, 31;
T.7N., R.8W., Secs. 11, 12, 14, 24, 25;
T.8N., R.7W., Sec. 32.*

Discussion: All public land within the zone of influence (with the exception of approximately 5,600 acres as identified in action 7 above) will remain unclassified and be available for disposal, as per the 1980 CDCA Plan, as amended, and the Record of Decision for the Land Tenure Adjustment Project. The vehicle access designation will be closed on the above sections of public land to eliminate the possibility for isolated parcels of public land to be utilized for OHV play.

Route Designation

- 9) *Within the zone of influence designate routes EF191, EF192, EF194, EF195, EF1911, EF1932, EF1938, EF1953, EF1964, EF201, EF204, EF161, EF162, EF163, EF121, EF181, R1, R2, R3, R4, EF141, EF101, and EF102, as "open" to vehicle use. Designate all other vehicle routes and washes as "closed" to motorized vehicle use.*

Discussion: To provide a motorized vehicle access network within the zone of influence primary routes of travel have been designated "open". All open routes are identified in Illustration 5. Some of these routes are through lands with a vehicle access designation of "closed" as indicated in actions 7 and 8 above. The remaining routes, located in the north-east corner of the zone of influence, are within an area where route designation was completed. A route inventory was completed for the public land within the area of route designation (see Illustration 6). The route inventory was completed by a combination of aerial and ground mapping.

- 10) *Identify and designate additional routes as "open", or "closed", as the situation warrants, utilizing the annual route designation amendment process.*

Discussion: The annual route designation amendment process will be used for public land within the zone of influence. This process is a management tool to review existing route designations to assure compatibility with management objectives and resource values.

Withdrawals

- 11) *Withdraw the entire lakebed (historical size) and the location of the headquarters complex from all mineral entry.*

Discussion: The recreational value of the lakebed is such that the lakebed should be protected from any disturbances associated with exploration and/or mining activities. Initial mineral surveys indicate there is a low potential for minerals to be located at the site of the headquarters complex. The location is central to the Management Area, and the public funds and time invested in developing the site will be considerable. Furthermore, any mining activity at the headquarters complex will result in a disruption to visitor services (refer to appendix A - Resource Data for a more complete description of the areas mineral potential).

B. AUTHORIZED ACTIVITIES

Permits/Vending

- 1) *Issue permits for educational, commercial, non-profit and organized recreation activities for use throughout the Management Area.*

Discussion: Due to its close proximity to major commerce and population centers the Management Area is used for a multitude of purposes, including recreation, education, commercial, and philanthropic causes. The permitting process will allow these many uses to occur while minimizing conflicts with the casual recreational visitor. Certain permitted uses and activities may require temporary restrictions within portions of the Management Area. All permitted activities will be closely monitored to ensure their compatibility with the resources and the safety and well-being of other visitors.

Vending permits will be issued for the sale of foods, beverages, goods, and services. Vendors must have the applicable state and county permits and licenses for their business. Vendors must be self contained, travel on existing routes, and may not interfere with other authorized uses or create unacceptable impacts.



EL MIRAGE COOPERATIVE MANAGEMENT AREA

OPEN ROUTES

- Open Routes
- Key Routes on Private Land

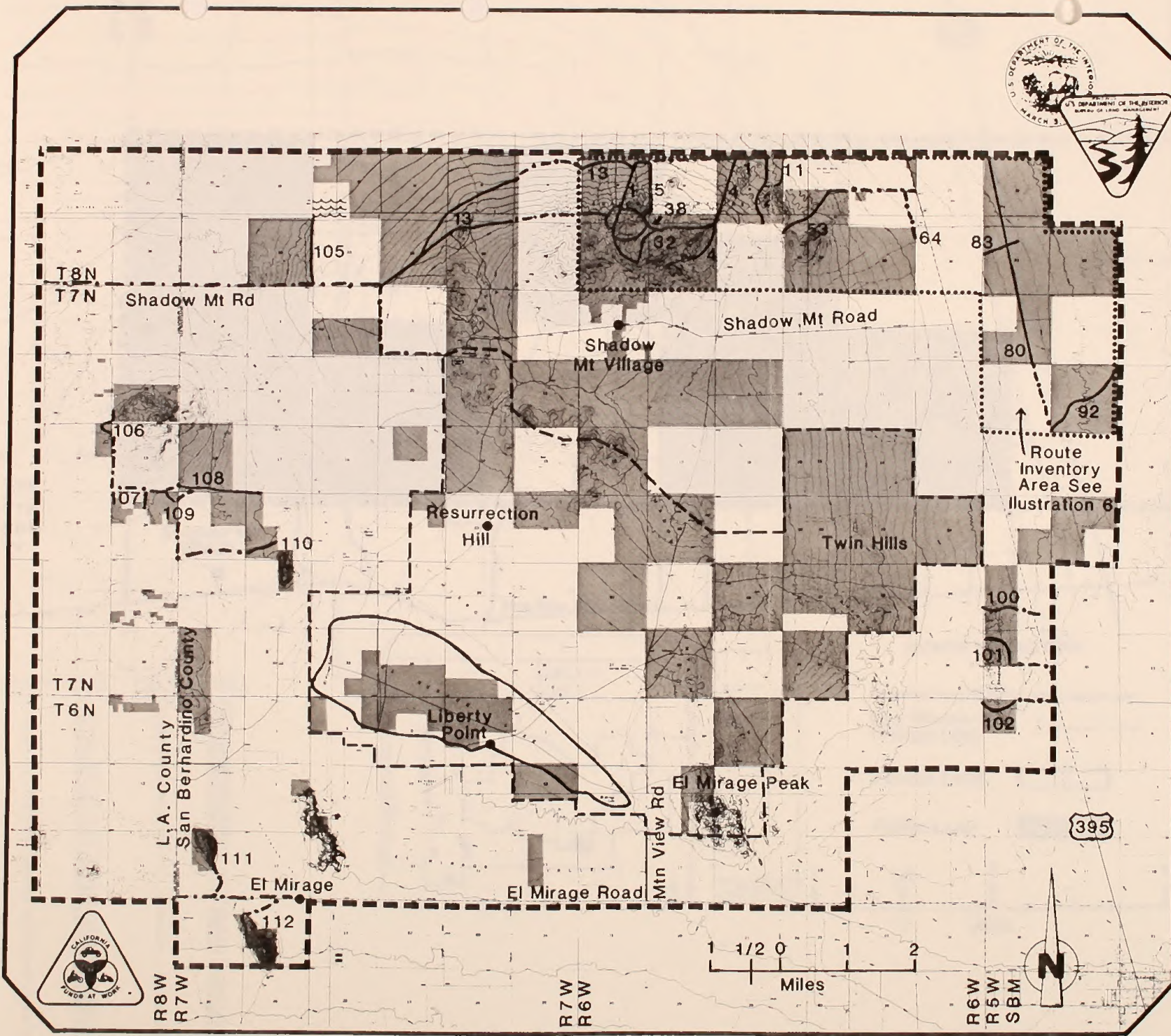
Open Routes	
Route Number on Map	Official Route No.
1	EP191
2	EP192
4	EP194
5	EP195
11	EP191L
32	EP1912
38	EP1918
53	EP1991
68	EP1968
80	EP201
81	EP204
92	EP160
100	EP161
101	EP162
103	EP123
105	EP161
106	AL
107	R2
108	R7
110	EP161
111	EP121
112	EP102

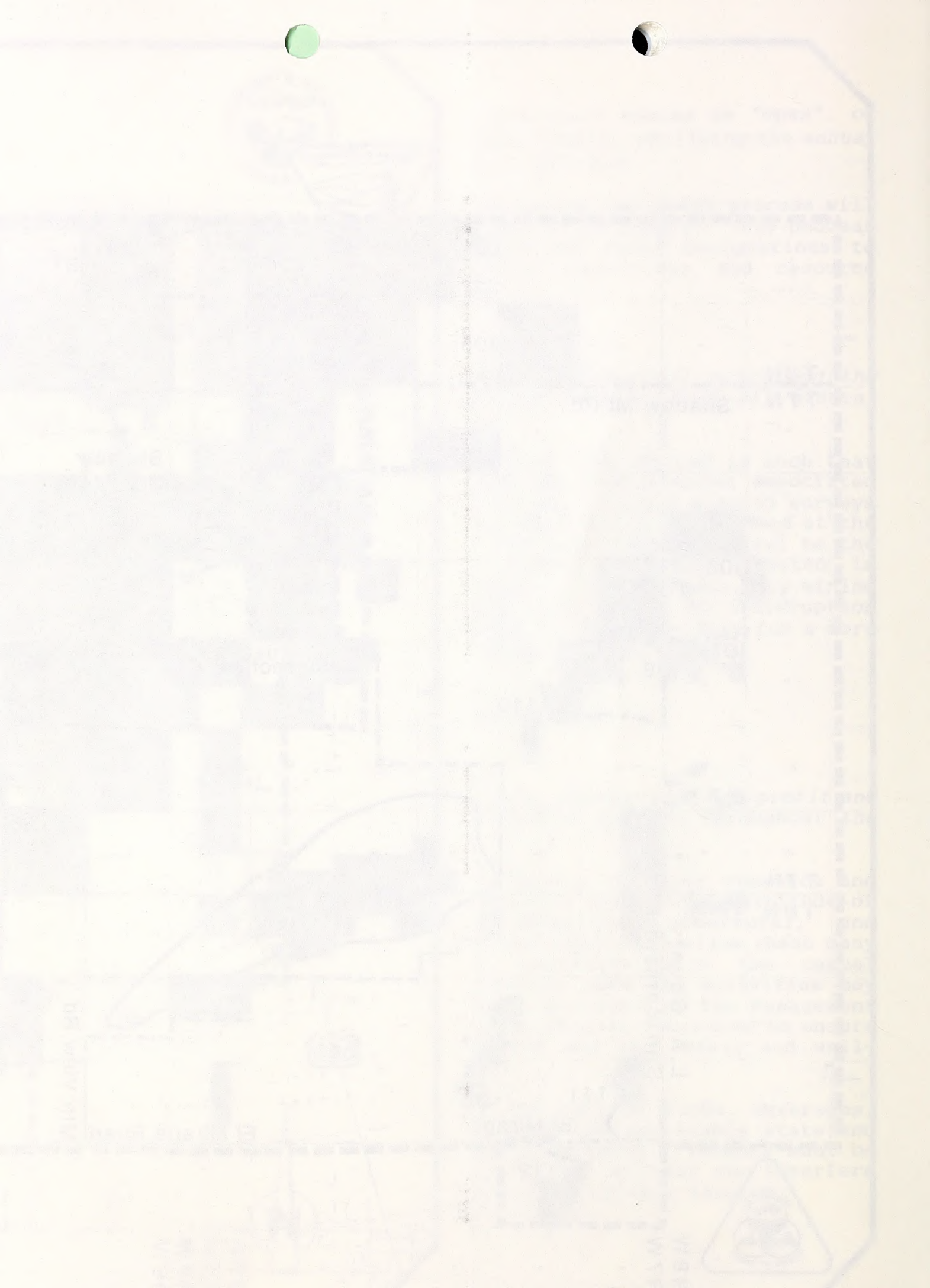
BOUNDARIES

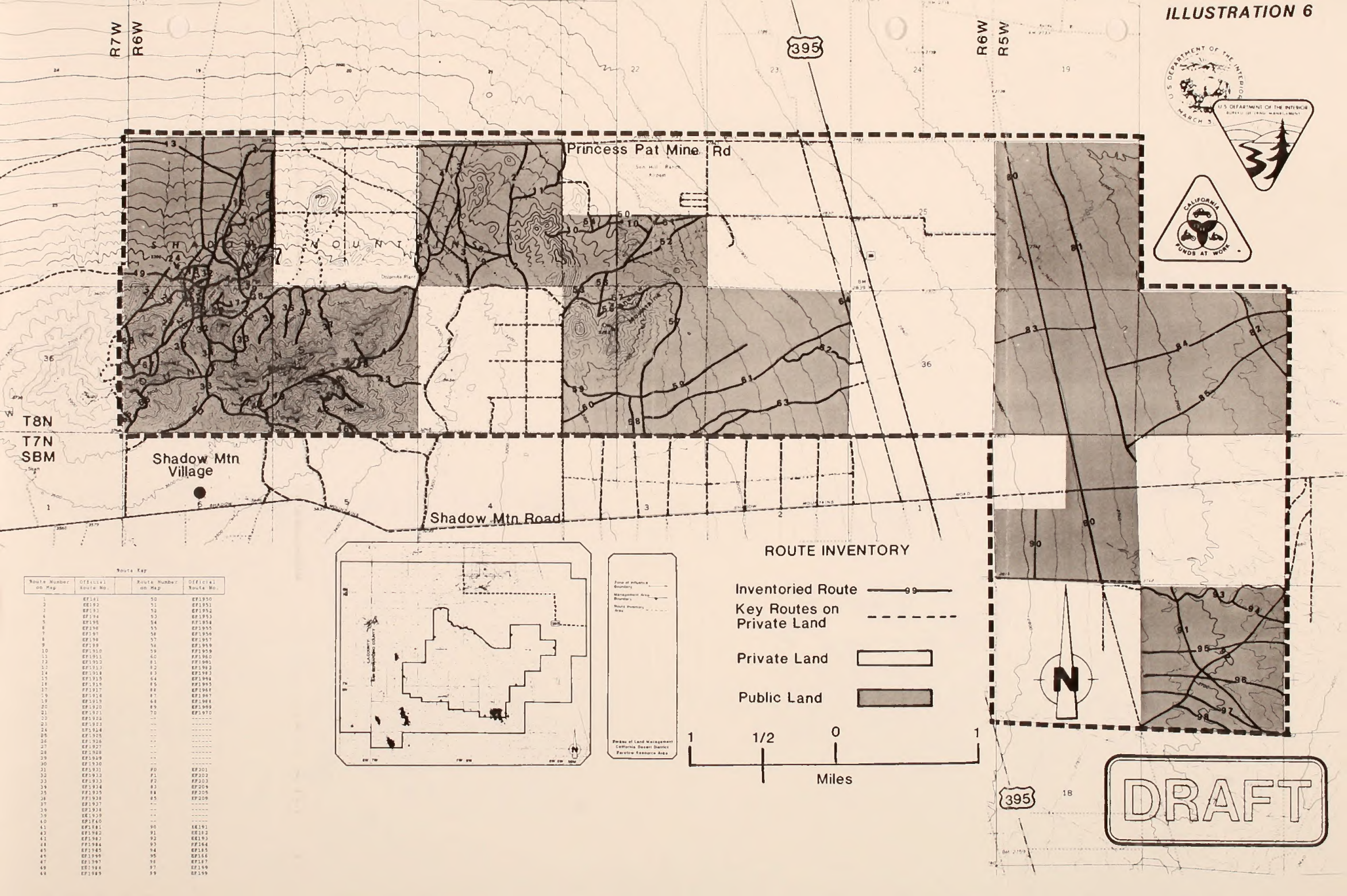
- Management Area Boundary
- Zone of Influence Boundary
- Private Land
- Public Land
- State Land

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Barstow Resource Area

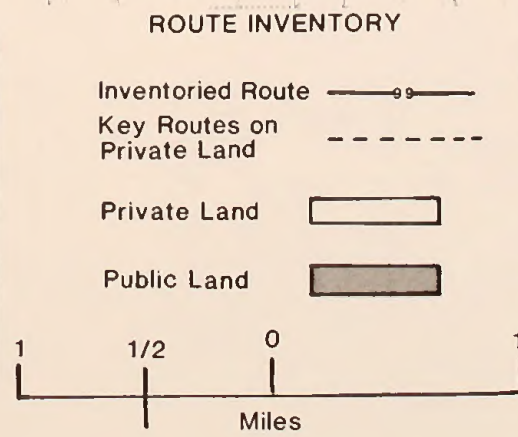
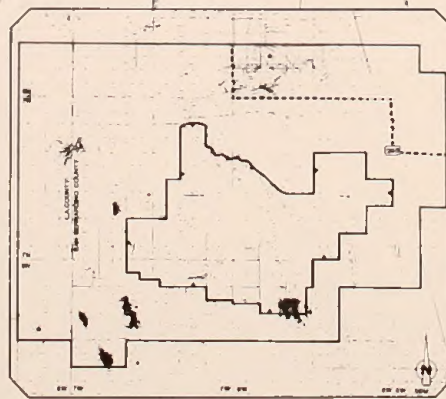






Route Key

Route Number on Map	Official Route No.	Route Number on Map	Official Route No.
1	EF181	50	EF1950
2	EF182	51	EF1951
3	EF183	52	EF1952
4	EF184	53	EF1953
5	EF185	54	EF1954
6	EF186	55	EF1955
7	EF187	56	EF1956
8	EF188	57	EF1957
9	EF189	58	EF1958
10	EF190	59	EF1959
11	EF191	60	EF1960
12	EF192	61	EF1961
13	EF193	62	EF1962
14	EF194	63	EF1963
15	EF195	64	EF1964
16	EF196	65	EF1965
17	EF197	66	EF1966
18	EF198	67	EF1967
19	EF199	68	EF1968
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21	EF201	70	EF1970
22	EF202	71	EF1971
23	EF203	72	EF1972
24	EF204	73	EF1973
25	EF205	74	EF1974
26	EF206	75	EF1975
27	EF207	76	EF1976
28	EF208	77	EF1977
29	EF209	78	EF1978
30	EF210	79	EF1979
31	EF211	80	EF1980
32	EF212	81	EF1981
33	EF213	82	EF1982
34	EF214	83	EF1983
35	EF215	84	EF1984
36	EF216	85	EF1985
37	EF217	86	EF1986
38	EF218	87	EF1987
39	EF219	88	EF1988
40	EF220	89	EF1989
41	EF221	90	EF1990
42	EF222	91	EF1991
43	EF223	92	EF1992
44	EF224	93	EF1993
45	EF225	94	EF1994
46	EF226	95	EF1995
47	EF227	96	EF1996
48	EF228	97	EF1997
49	EF229	98	EF1998
50	EF230	99	EF1999



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TABLE 1	
Item	Description
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- 2) *Issue permits according to Bureau policy, and the guidelines and procedures established for the Management Area. The guidelines and procedures may be updated and changed periodically by the Project Manager as necessary to effect management goals.*

Discussion: Guidelines and procedures, as outlined in Appendix B, have been established to reduce conflicts among the various permitted users of the Management Area. To facilitate permitting use on the lakebed, it has been divided into six permit sections (Illustration 7).

- 3) *Prohibit the following vending operations within the El Mirage Cooperative Management Area (the list will be periodically updated at the Project Managers discretion):*
 - (a) *The sale of beverages in glass containers.*
 - (b) *The rental of 3-wheeled ATVs.*
 - (c) *The sale of paint.*
 - (d) *The sale or rental of equipment used for war games, such as paint guns or paint pellets.*
 - (e) *The sale of fireworks.*

Concession Operations

- 4) *Issue long term leases to operate concessions within the El Mirage Cooperative Management Area provided the services/goods comply with the criteria for vending permits and meet the BLM's management goals.*

Discussion: Currently there is no identified need to issue long-term leases for concession operations. The decision not to issue such leases will be reviewed in 5 years.

Grazing and Mining

- 5) *Allow grazing and mining within the Management Area.*

Discussion: Multiple-use natural resource management can continue within the Management Area with a minimum impact on recreation use of the area. Grazing and mining operators must operate in compliance with existing laws, regulations, and procedures established for the CDCA. Mining will not be allowed in areas which have been withdrawn from mineral entry.

Military Uses

- 6) *Allow military exercises within the Management Area with the appropriate authorizations.*

Discussion: Authorized exercises must be compatible with the goals and management actions stated within the Management Plan for the El Mirage Cooperative Management Area. There is a long history

of the military performing exercises in the vicinity of the lakebed. Previous exercises have proven compatible with other uses of the area, and therefore, they should be allowed to continue.

Rights-Of-Way

- 7) *All existing rights of way within the Management Area will be recognized.*

Discussion: Rights of way within the Management Area include authorization for utility lines across the east end of the lakebed. These lines are currently on private land that is identified for acquisition. There is also a right of way across private and public land at the east end of the Management Area parallel to highway 395. These rights of way are an integral aspect of the regional infrastructure.

C. VISITOR MANAGEMENT

Recreation Activities

- 1) *Allow all types of activities to occur within the Management Area, except those activities that create unacceptable safety concerns or unnecessarily degrade the environment.*

Discussion: The El Mirage Cooperative Management Area has historically been a place where the only limit to what occurs is the imagination. All historic recreation activities will be allowed to occur except those that include the following:

- (a) Discharge of firearms.
- (b) Hunting.
- (c) Hare and Hound OHV events.

This list of prohibited activities will periodically be reviewed based upon resource monitoring and visitor use information. New activities will be allowed within the Management Area if they are not in conflict with existing uses, they do not create unacceptable safety concerns, or unnecessarily degrade the environment.

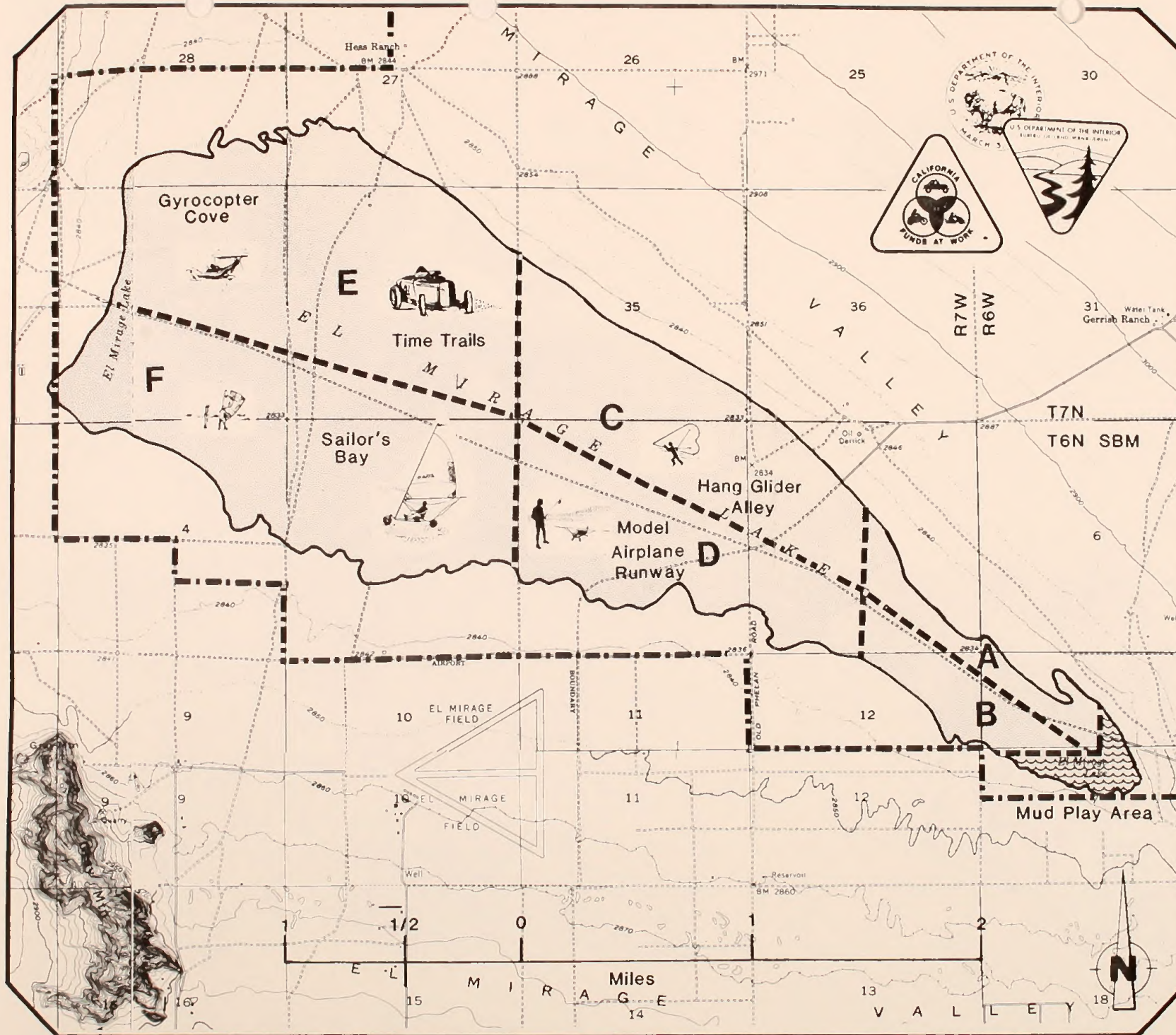
- 2) *Allow visitors to engage in the activities of their choice at any location on the lakebed, provided they do not interfere with the health and safety of other visitors.*

Discussion: Visitors have historically engaged in the activities of their choice at any location. Some activities require a certain degree of isolation from other vehicular or air traffic, therefore, some user groups have selected certain areas to engage in their activities. Over time these use patterns have developed into

LAKE BED MANAGEMENT

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historical settings which will be identified as directed use areas on brochure maps (Illustration 7).

- 3) *Close the lakebed to aircraft landings and take-offs from one half (1/2) hour after sunset to one half (1/2) hour before sunrise.*

Discussion: Due to the extensive variety of activities occurring on the lakebed on a 24 hour basis, it is not safe, nor practical to have aircraft taking off and landing on the lakebed when it is dark.

- 4) *Establish a mud play area east and south of the utility poles, approximately 400 yards wide, as identified in Illustration 7.*

Discussion: Although the lakebed has been closed to vehicle use where wet since 1985, there has been an outpouring of public demand for an area to engage in OHV mud play. In response to this demand the eastern end of the lakebed has been set aside for this activity. A vehicle barrier will be constructed between the lakebed and the mud play area.

- 5) *Recognize national vehicle and aircraft rights-of-way protocol for the operation of vehicles and aircraft within the Management Area, and establish operating guidelines for the use of craft to minimize visual and audio impacts.*

Discussion: Commonly recognized rights-of-way that will be enforced within the Management Area include the following:

- (a) On the ground, non-motorized craft have the right-of-way over motorized craft.
- (b) In the air, a balloon has the right of way over any other category of aircraft; a glider has the right of way over an airplane or rotorcraft. Aircraft towing other aircraft have the right of way over all other engine-driven aircraft. Ultralights shall yield to all aircraft.

Flying craft utilizing the Management Area will be encouraged, in printed brochures, not to fly over the inhabited areas outside of the Management Area except:

- (a) Summer & Spring: During the hours of 8:00AM - 8:00PM.
- (b) Winter & Fall : During the hours of 8:00AM - 4:00PM.
- (c) At an elevation no lower than 500'.

Furthermore, guidelines and rules of operation will be adopted for the operation of tethered aircraft towing operations on the lakebed (hang-gliders, para-sailors, gliders, gyrocopters, etc.). The guidelines will be formulated through coordination with the involved user groups and the appropriate professional organizations.

Camping

- 6) Allow camping throughout the entire Management Area with the following exceptions:
 - (a) On the lakebed, camping is restricted to within 100 feet of the shoreline, natural mounds, or jetties; except in the case of permitted events.
 - (b) Around the perimeter of the Management Area camping is not allowed within 100 feet of the barrier, except in sections 14 and 15 of T.7N., R.6W., SBM, in the Twin Hills area where camping is restricted to 500 feet from the perimeter barrier.
 - (c) Camping is not permitted within the headquarters complex, or in/on any of the facilities.

Discussion: Visitors are free to camp almost anywhere they wish throughout the Management Area and along the lakebed perimeter. However, camping is not allowed "out in the open" on the lakebed, more than 100' away from the shore. This restriction is to avoid creating excessive congestion or possible safety hazards on the lakebed.

Camping and OHV staging activities are closely associated with vehicle access. Camping will be encouraged in the existing heavily used areas by maintaining the access and by locating the restrooms in these areas.

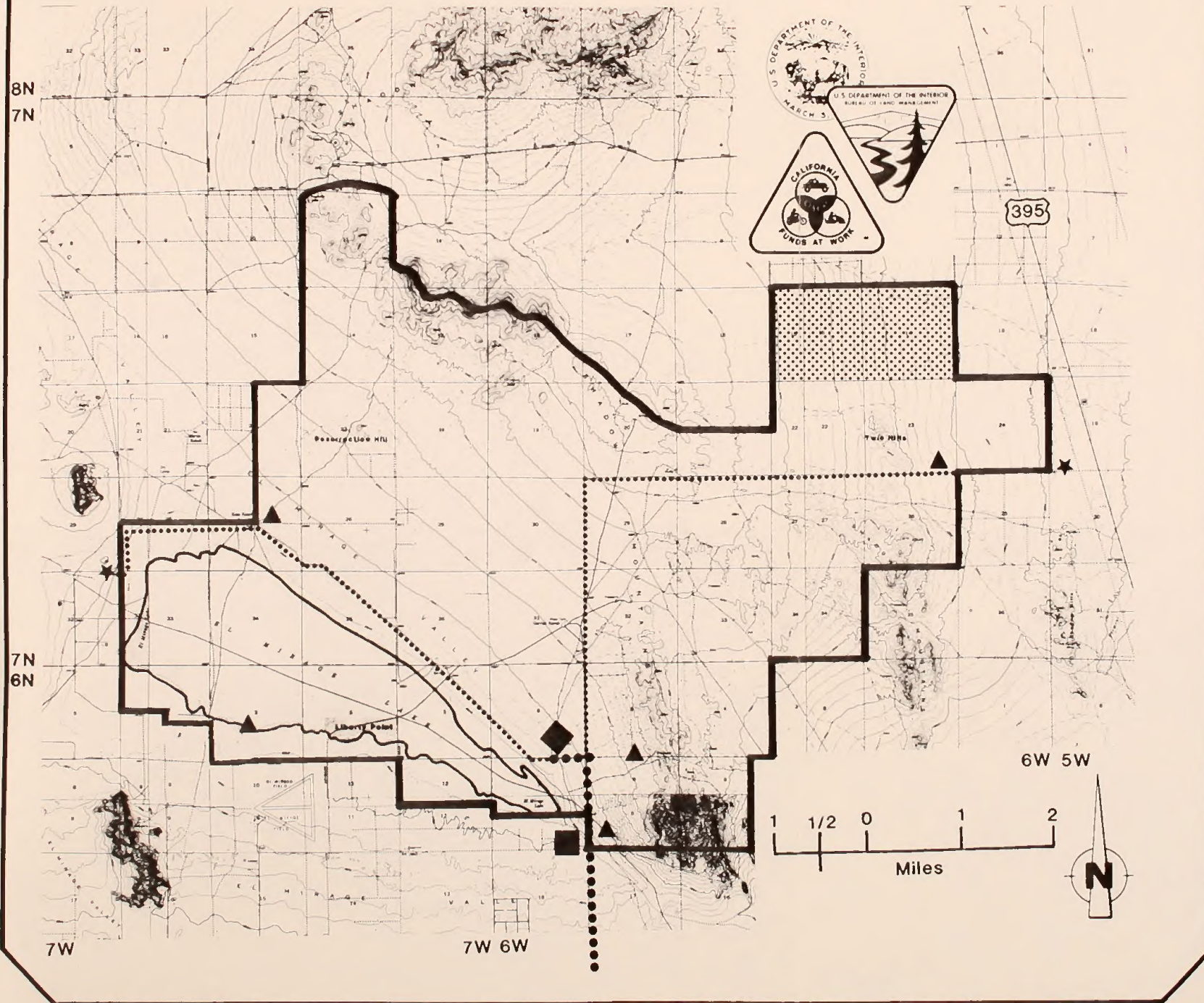
There is a 14 day limit on camping within the Management Area.

- 7) Designate sections 14 and 15 of T.7N., R.6W., SBM, in the Twin Hills area as a reserved group camping area (Illustration 8)

Discussion: The Management Area has historically been used by large groups for camping and staging in association with the use of OHVs. These groups often attempt to camp in isolated locations away from other visitors. Given the projected increase in use, it is foreseeable that the opportunities for such camping may become limited. The Twin Hills area was selected as a group camping area because it is removed from the main access road and the majority of traffic. In addition, this area is readily accessible by primary vehicles.

Procedures for Group Camping Reservations:

- a) The group camping area will be made available only by reservation. Reservations may be made by phone or mail on a first come first serve basis. Minimum group size is 25 people and only one group is allowed per section at a time.



EL MIRAGE COOPERATIVE MANAGEMENT AREA

FACILITIES

- Main Entrance Station
- ★ Secondary Entrance
- ▲ Restroom
- ◆ Headquarters Complex
- Paved Access Road
- Primary Road
- Perimeter Barrier
- ▨ Reserved Camping Section

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California Desert District
Barstow Resource Area



- b) A \$25.00 deposit must be paid within five days of the reserved date to guarantee a reservation, and to ensure the site is left in a clean condition. The deposit will be refunded the first working day after the date of use. The deposit is forfeited if the site requires clean-up, or if the reservation is cancelled within five days of the reserved date.
- c) There is no camping within 500' of the perimeter barrier in the reserved group camping area.

Fees

- 8) *Charge fees for each primary vehicle entering the Management Area (except those persons on official business and inholding landowners).*

Discussion: The perimeter of the entire Management Area will be fenced and all access will be controlled. Entrance fees will be collected and placed in a trust fund upon completion of the entrance station. Monies in the trust fund will be returned to the Management Area to offset operation and maintenance costs.

Fees will be collected by personnel working at the entrance station. The main entrance will be open 24 hours every day. The east and west entrances will only be open during major holiday weekends. When the entrance station is not staffed, the rangers will make contact with visitors for the purpose of collecting fees.

Fees may be waived for those persons visiting on official business and participants of an activity for which a permit was issued. Season passes will be sold and issued to individuals. Only one primary vehicle a day may enter the Management Area with the same season pass.

Entrance fees will be adjusted periodically to remain comparable with fees charged at State Vehicle Recreation Areas, County Parks, and private motorcycle parks.

The initial entrance fees (1990) were set as follows:

- (a) \$3 per vehicle - Daily entry.
- (b) \$5 per vehicle - Per night camping fee, 14 day limit.
- (c) \$30 seasonal pass - unlimited access for one calendar year.

- 9) *Issue gate keys to permit holders and/or landowners for the east and west entrances on a limited basis and only for special situations when a clear need has been identified.*

Discussion: The purpose for putting up a barrier around the Management Area is to control access. There are no county roads that provide access through the Management Area. To this extent all gates other than the main entrance station will remain closed

and locked, except the west and east entrances which will be open during 3 day holiday weekends.

This action will allow controlled access through the east and west entrances under special circumstances when they are normally closed. Keys may be issued for permitted events when doing so would reduce congestion and safety concerns from high volumes of traffic traversing the Management Area.

Keys may be issued to landowners for the west entrance under the following guidelines:

- (a) Own land within one mile of the west entrance. The land must have been developed prior to January 1, 1989.
- (b) Purchase an annual pass.
- (c) Sign a register.
- (d) Pay a \$5 key deposit.
- (e) Abide by the Management Area rules.
- (f) Key may only be used by the person to whom the key was issued, or members of their immediate family.
- (g) Key is property of the Cooperative Management Area and is non-transferable.

Law Enforcement

- 10) *Provide law enforcement services by: 1) hiring, equipping, and training BLM law enforcement rangers to work within, and adjacent to, the Management Area; 2) signing an agreement with the San Bernardino County Sheriff delegating the rangers the authority to enforce county and state laws; and 3) coordinating with the San Bernardino County Sheriff Reserve Deputies for patrolling within and adjacent to the Management Area.*

Discussion: The major issue confronting the Management Area is the uncontrolled use of OHVs and the resulting trespass situation in adjacent communities. The El Mirage Cooperative Management Area will only be successful when OHV use is controlled within the zone of influence, and confined to the Management Area.

Under the present situation the county sheriff and the California Highway Patrol are responsible for enforcing all laws in the communities surrounding the Management Area. This will not change. The Los Angeles and San Bernardino County Sheriff Office (S.O.) along with the California Highway Patrol (CHP) will continue to be the primary providers of law enforcement in the communities adjacent to the Management Area.

The BLM will be hiring, training, and equipping three law enforcement rangers to serve on the Management Area staff. As part of their duties, these rangers will be assisting the sheriff and the CHP in controlling the illegal OHV recreation related use within the zone of influence surrounding the Management Area.

An agreement between the Sheriff of San Bernardino County and the BLM will be developed to enable L.E. rangers to enforce state and county laws relative to OHV use on private land within the zone of influence. The L.E. rangers will then perform intermittent patrols on public and private lands adjacent to the Management Area to ensure that visitors are complying with area closures and trespass laws.

The supervisory BLM L.E. ranger will establish procedures for coordinating the use of San Bernardino County Reserve Deputies for providing law enforcement within and adjacent to the Management Area on special occasions or when the need arises. The Supervisory Ranger will also develop, publish, and implement a series of supplemental laws to provide the mechanism to enforce the actions necessary for management of the El Mirage Cooperative Management Area (Appendix C).

- 11) *Establish the following functional priorities for the law enforcement rangers within the Management Area:*
 - (a) *Enforce all laws relating to resource protection and visitor management.*
 - (b) *Provide emergency services: first aid/fire.*
 - (c) *Provide mutual aid to other agencies.*
 - (d) *Assist with information and interpretation programs.*
 - (e) *Assist with maintenance functions.*

Discussion: The priority function of L.E. rangers is resource protection. Conservation laws will be vigorously enforced and include those relating to the protection of vegetation, wildlife, and the "pack it in-pack it out" trash philosophy. There will be random checks at the entrance for equipment and registration compliance checks.

Rangers will continue to respond to requests for visitor assistance and will be EMT qualified and equipped. However, there will be one full-time and two part-time EMT personnel working within the Management Area to assume the primary emergency response function.

The primary focus of all law enforcement contacts within the Management Area will be visitor education and interpretation.

Emergency Medical Services

- 12) *Provide emergency medical services by: 1) hiring, equipping, and training EMT/visitor services rangers to provide first aid and visitor services within, and adjacent to, the Management Area; and 2) cooperating with other agencies according to the provisions contained in an emergency medical services operating plan.*

Discussion: The EMT/visitor services rangers will consist of one permanent full-time and two permanent part-time personnel. The

visitor services personnel will respond to medical emergencies in the immediate vicinity of the Management Area according to established provisions in existing mutual aid agreements.

Currently first aid is provided within the zone of influence through interagency cooperation among the BLM, California Department of Forestry (CDF), CHP, El Mirage Volunteer Fire Department (E.M.V.F.D.), San Bernardino S.O., and a private ambulance firm. This working relationship will not change. Agency response procedures and priorities for medical emergencies within the Management Area are outlined in an emergency response plan. This plan involves dispatchers for the BLM, CDF, CHP, County S.O., E.M.V.F.D., and Valley Ambulance in Victorville, and includes automatic dispatch orders for incidents with serious injuries.

The emergency medical services operating plan will be reviewed each year by the supervisory BLM ranger and updated as necessary.

- 13) *Establish the following functional priorities for the EMT/visitor service rangers:*
 - (a) *Serve as the primary responders to medical emergencies within the Management Area.*
 - (b) *Assist other agencies adjacent to the Management Area through mutual aid agreements.*
 - (c) *Assist with the information and interpretation program.*
 - (d) *Assist the L.E. rangers with vehicle registration compliance.*
 - (e) *Perform maintenance functions.*

Discussion: All patrol personnel (L.E. and EMT/visitor service) will be EMT qualified and equipped. The EMT/visitor services rangers primary function is to provide emergency medical care to visitors.

Fire Management

- 14) *Train and equip Management Area personnel to initiate fire suppression efforts.*

Discussion: Increased visitor populations will raise the potential for both wildland and vehicle related fires. A coordinated suppression effort among Management Area staff, the BLM California Desert Fire Management Office, and the El Mirage V.F.D. will be critical in protecting resource values, physical structures, and the health and safety of visitors. A mutual response plan will be prepared involving the aforementioned parties.

Currently the EL Mirage V.F.D. is primarily funded via a tax assessment district that includes the entire Management Area. As a result of the acquisition program, private land within boundaries

of the Management Area will be acquired into federal ownership and no longer subject to this tax assessment. The operating revenue potential for the El Mirage V.F.D. from the assessment district will be reduced.

These effects were recognized by the El Mirage V.F.D. when it was formed in 1986. Representatives from the community of El Mirage participated in the Workgroup that prepared the *Feasibility Study for the El Mirage/Shadow Mountains* (1986). In a good faith effort, BLM has agreed to work closely with the El Mirage V.F.D. to minimize the impacts of this potential loss in revenue. Such efforts may include such things as making surplus fire fighting equipment available to the E.M.V.F.D.

Volunteer Program

- 15) *Establish a Cooperating Association through which all volunteer activities will be coordinated.*

Discussion: To a large extent, the Management Area was realized by the efforts of several individuals and groups who utilize the El Mirage area for recreation. This action will provide a means by which they may remain active in the operation of the Management Area.

A cooperating association will help assure that the focus and direction of the Management Area remain in the best interest of the visitors and the adjacent communities. This will also provide an avenue for tasks to be accomplished within the Management Area that require additional resources beyond the capability of the staff or budget.

Volunteers will be used for maintenance and visitor service functions including, but not limited to:

- (a) Providing routine visitor service patrols.
- (b) Staffing a visitor contact station.
- (c) Maintaining facilities and equipment.
- (d) Preparing and presenting interpretive programs.
- (e) Assisting with OHV compliance checks.

The Southern California Timing Association has expressed interest in constructing a memorial within the Management Area. The memorial would be in recognition of racers who have lost their lives, and to others who have made significant accomplishments. There may also be a need to recognize other historic uses of the Management Area as well as large scale volunteer efforts. "Living Memorials" will be encouraged. An entry station or some other facility would certainly benefit future visitors as well as recognize past accomplishments. Memorials will be constructed at the expense of the involved organization.

Signs and Information

- 16) *Erect and maintain direction, information, and regulatory signs in accordance with the sign plan for the Management Area. The sign plan will be periodically updated as necessary.*

Discussion: Signing the Management Area, and major access roads, will be in accordance with Bureau policy and the sign plan for the El Mirage Cooperative Management Area. This sign plan is an operational handbook that details specific standards, locations, and maintenance schedules for all signs.

Direction signs will direct visitors to the Management Area from the major highways in the high desert: Highways 14, 15, 18, 138, and 395. These are a combination of federal, state, and county highways.

Information signs will be located at the entrance to the Management Area to inform visitors of the location of facilities, the rules and regulations, and the identity of the parties responsible for the El Mirage Cooperative Management Area.

Regulatory signs will be located throughout the Management Area and the zone of influence to control traffic, and to advise visitors of specific regulations, such as lakebed closure when wet.

- 17) *Develop a small visitor contact station for the purposes of providing visitor information and first aid.*

Discussion: A small visitor contact station will be developed to provide visitor services. The type of visitor services to be provided include answering public inquiries, providing maps and brochures, directions, and first aid.

Information will be available concerning OHV opportunities, plus cultural and natural resources of the high desert. Emphasis will be on the safe and responsible use of OHVs to enhance rider enjoyment and safety, while attempting to minimize impacts to the natural environment.

A 24-hour recorded message phone line will also be installed and operated to include the following information:

- (a) Weather conditions.
- (b) Special restriction/closures.
- (c) Special events.
- (d) Fee schedule.

- 18) *Staff the visitor contact station with a combination of staff personnel and volunteers.*

Discussion: Once established, the visitor contact station will be staffed on a regular part-time basis by personnel from the BLM and the volunteers. Initially the visitor contact station will be open from 11 a.m. - 2 p.m. on Saturdays and Sundays, staffed with BLM personnel. As the Cooperating Association is developed the goal is to expand the hours of operation to 9 a.m. - 5 p.m. on weekends, through the use of volunteers.

These are target hours of operation that may require adjustment according to staffing and work load needs. Brochures and maps will be available on the outside of the building on a 24 hour basis. In addition, a public telephone will be located outside of the visitor contact station for reporting accidents on a 24 hour basis.

- 19) *Develop an area specific brochure for distribution to the visitors containing such information as boundaries of the Management Area, rules and regulations, riding tips, and general information specific to the area.*

Discussion: The brochure will provide visitors with the information and knowledge they need for a safe and enjoyable visit to the Management Area.

The brochures will be reprinted every other year to replenish inventories and to allow an opportunity for updates.

- 20) *Publish a newsletter every other month for distribution to the visitors.*

Discussion: The newsletter will include such things as upcoming events, seasonal tips, safety tips, and current events concerning recreation. These handouts will be available at the main entry station and will be used by all patrol personnel when making visitor contacts to explain resource protection and safety concerns.

- 21) *Develop a self-guided tour brochure to interpret and explain various cultural, geographic, and botanical points-of-interest within the Management Area.*

Discussion: Points of interest will be identified on the ground with numbered stakes correlated to the brochure. There are numerous cultural and historic sites of interest within the Management Area that are worth interpreting. In addition, the geologic history relative to the creation of the dry lakebed is very intriguing.

The remote potential also exist for isolated populations of sensitive plant species to exist within the Management Area. Such populations will be protected and included in the self-guided tour.

The development of an interpretation program is intended to reduce impacts on the environment and to satisfy normal desires for knowledge and information concerning the area's past history.

D. RESOURCE PROTECTION AND MANAGEMENT

Lakebed Management

- 1) *Allow no activities on the lakebed that will result in a disturbance to the surface of the lakebed, other than that which is normally caused by the passing of a vehicle.*

Discussion: El Mirage Dry Lakebed is the special feature that makes the Management Area such a popular destination for such a large variety of recreational uses. This natural resource is fragile and requires special consideration to ensure its availability for use in the future.

No surface disturbances are allowed (other than those authorized for conservation purposes), and it is illegal to alter the surface of the lakebed. The lakebed is closed when wet or muddy. Surface disturbances that inadvertently occur must be repaired according to "lakebed repair standards", (Appendix D). This applies to both permitted commercial and recreational activities, as well as to the use by individual visitors.

Permitted events on the lakebed will be required to comply with special permit stipulations which may include spraying the lakebed with water, or a retardant, to reduce fugitive dust.

For purposes of lakebed management the mud play area (Illustration 7) is not considered part of the lakebed proper.

- 2) *Remove dirt mounds from high traffic areas, fill holes and depressions, clear off vegetation, and take action as necessary to maintain an open, smooth, and hard packed lakebed surface.*

Discussion: In the last few decades wind and water erosion has greatly increased on the lakebed due to the amount of human activity and the surface is now in the process of changing.

In some areas, the operation of vehicles on the lakebed while it was wet has resulted in a change in the structure of the clay, breaking it up and leaving it less compacted. This breakdown in the integrity of the hard packed surface allows vegetation to become established, which in turn provides a small windbreak that leads to an accumulation of soil. The deposited soil is of a different composition than the rest of the lakebed, and it dilutes the concentration of clay. In addition, repeated vehicle use over

and over in one place pulverizes the lakebed surface and generates "poof" dust, which ends up as fugitive dust during windstorms. The net result of this process is the rapid loss of the smooth, hard-packed lakebed surface.

To further complicate matters, the pumping of water from wells in the area is lowering the water table. This effects the lakebed by causing the underlying levels of the lakebed to dry out, resulting in large deep cracks across the lakebed surface.

Some of the work that will be accomplished on the lakebed to retain an open, hard packed surface, includes: the removal of recent vegetation from within the historical acreage of the lakebed surface, the removal of dirt mounds from high traffic areas and locations where they restrict use on the lakebed, the filling in of holes and depressions wherever they occur, and the placing of more openings in the existing man-made levees across the lakebed.

Vegetation Management

- 3) *Plant vegetation, on a limited basis, throughout the Management Area to replace vegetation destroyed as a result of recreation activities.*

Discussion: Vegetation affects all other natural resources and is the resource that is most easily managed. Maintaining appropriate levels of vegetative cover will minimize soil loss, provide wildlife habitat, assist in maintaining a spatial distribution of visitors, provide plant diversity, and contribute to the visual quality of the area.

There are no known threatened or endangered plant species within the Management Area. As part of the interpretive program, inventories will be conducted in areas where the potential exists for remnant stands of such plants.

The recreationists that visit El Mirage are attracted to Joshua trees for camping. Unfortunately the Joshua trees in several popular camping areas have been lost by acts of vandalism including burning and shooting.

Specific campsites will not be designated within the Management Area. To encourage use of historic camping areas, destroyed trees will be replaced with either transplanted Joshua trees, or other types of native desert species.

Different types of vegetation that may be used will include species that are faster growing, and more tolerant of human abuse than Joshua trees. Some of these types of vegetation include, palo verde, cat claw, ironwood, and mesquite. All species planted will be native desert vegetation that will, over time, grow independent of supplemental watering.

The El Mirage Cooperative Management Area has been identified as a recipient site for Joshua trees displaced as a result of development throughout the high desert. In addition, donations will be sought through the Cooperating Association for equipment, funds, and manpower, for use in transplanting Joshua trees to within the Management Area.

Within the Management Area, the no camping area within 100' of the perimeter barrier will be designated as a Joshua tree preserve. Planting Joshua trees here will provide a visual buffer around the Management Area, and establish habitat for wildlife.

- 4) *Install vehicle barriers, on a limited basis, to protect vegetation and to control traffic.*

Within areas that are intensely used for camping and day use, Joshua trees, grasses, and shrubs will be maintained in small islands protected by barriers. These islands of vegetation may vary in size and contain several trees. In addition, barriers may be installed along primary roads as necessary to direct use and protect vegetation. The barriers may consist of signs, rocks, post & cable, fence, culverts, embankments, or similar devices.

- 5) *Use temporary closures to restrict vehicle traffic for short periods of time within the Management Area to allow the implementation of conservation measures.*

Discussion: Temporary vehicle restrictions will provide protection to small areas within the Management Area where conservation measures are being implemented. Potential sites for these restrictions include steep hillsides where trails are located on soils with a poor ability to withstand erosion; on the lakebed where holes or depressions have formed; along major trails where a route has experienced excessive widening; or in areas damaged by heavy use, fire, commercial activity, or other means. Such restrictions may also be used for the protection of wildlife habitat on a seasonal basis.

The conservation measures to be implemented will be designed for specific sites. They may include planting vegetation, installing water bars, filling holes, re-routing trails, maintaining trails, installing barriers, signing, and disseminating information through the personnel and literature.

Temporary restrictions may be in effect from a few days to a few years, depending on the extent of the damage and the nature of the conservation measures taken to rectify the situation.

Air Quality

- 6) *Impose lakebed use restrictions using a tiered system that correlates with a decrease in air quality due to fugitive dust.*

Discussion: Vehicle use on the lakebed can disturb the surface which results in fugitive dust leaving the Management Area during high winds. As the population in the Victor Valley continues to grow it is anticipated there will be a correlating demand to control fugitive dust. This action is designed to limit the amount of fugitive dust during wind storms, not the everyday dust generated by recreational activities.

Use restrictions will be imposed using the following chart:

CHART 1

Stage	Flag	Lakebed Restrictions
1	Green	No use restrictions.
2	Yellow	Maximum speed set at 35 mph, all vehicle types & all activities allowed.
3	Red	Maximum speed set at 20 mph, all vehicle types ok, no circle racing allowed.
4	Black	Lakebed closed to motorized vehicle use.

Please refer to section IIIG, monitoring, for details on how the various stages will be determined. The flags will be posted at the entrance and at several locations around the lakebed.

- 7) *Spray the primary road network with a dust control agent on a periodic basis to control fugitive dust.*

Discussion: The primary road network consists of approximately 16 miles of dirt roads. These roads receive heavy use by primary vehicles within the Management Area. Treating these roads with a dust control agent will: 1) greatly reduce the amount of fugitive dust during wind storms, 2) reduce soil erosion, 3) increase safety on the roads, and 4) increase the overall visual quality of the area.

Noise Standards

- 8) *Manage the ambient sound level within the Management Area to limit excessive noise from a single source (craft or activity).*

Discussion: All motorized vehicles operating within the boundaries shall be required to be equipped with a muffler and spark arrester (in accordance with the California Vehicle Code). Motorized vehicles entering the Management Area will be tested with a decibel meter to ensure their compliance with state noise standards. Testing will be on an intermittent and random basis.

Permitted events that generate a large volume of noise will be restricted to operation during daylight hours. Vehicles in permitted events may be given a waiver for compliance with state standards.

Cultural Resource Protection

- 9) *Identify, through inventory, potentially significant historic and prehistoric sites within the Management Area, and initiate Section 106 consultation with the State Historic Preservation Officer (SHPO).*

Discussion: As mandated by the National Historic Preservation Act the BLM is responsible for identification and management of cultural resources within the Management Area (Section 110). A stratified random inventory (class II survey) will be conducted on approximately 10% of the representative land forms within the Management Area. This representative sample will form the data base which will enable the management staff to determine future inventory requirements for the Management Area.

Private lands will also be inventoried for cultural resource values as they are acquired. Inventories will be completed prior to the construction of individual facilities within the Management Area. a determination of eligibility for nomination to the National Register of Historic Places (NRHP) will be made on all identified sites (Section 106). The SHPO will be consulted for concurrence on site eligibility determination and mitigation of potential impacts.

- 10) *Mitigate potential damage to significant cultural sites through protection and interpretation, to the maximum extent possible.*

Discussion: The El Mirage Cooperative Management Area has been receiving intensive recreation use for over fifty years. As a result of this extensive use it is theorized that any potential cultural sites have been heavily vandalized, or impacted by OHV play. Initial field surveys support this theory. Cultural

resources that retain sufficient integrity (and are determined to be significant) will be protected and interpreted to explain the history of human activity that occurred within and adjacent to the Management Area.

- 11) *Contact local Native American groups regarding the contemporary significance and/or use of lands within the Management Area.*

Discussion: Native Americans are known to have lived and/or utilized the natural resources present within the region encompassed by the Management Area. Consultation will be initiated with Native American representatives to provide the effected Native American communities an opportunity to comment on the proposed Management Plan.

Wildlife

- 12) *Promote and enhance opportunities for observing wildlife within the Management Area through the use of interpretive materials, by managing the vegetation, and by providing law enforcement.*

Discussion: An interpretive program will be developed to educate visitors about the wildlife that inhabits the Management Area, including habitat and food requirements and their role in the ecosystem.

The purpose of protecting and planting vegetation in popular camping and staging areas is twofold. First, it will maintain food and cover for wildlife. Second, it will maintain the attractiveness of the area for camping and staging. Such areas of concentrated use will thus remain in specific localized areas, and will not begin to develop throughout the entire Management Area.

Rangers will enforce all laws relative to the protection of native wildlife. Hunting and shooting will be prohibited within the Management Area.

- 13) *Re-condition and maintain two existing guzzlers within the Management Area and construct four additional guzzlers through the efforts of volunteers in the Cooperating Association.*

Discussion: The two existing guzzlers were constructed by the California Department of Fish and Game (CDFG) to enhance the habitat for wildlife. The guzzlers have since been vandalized and are in need of repair. The locations of the four new guzzlers will be scattered within the Shadow Mountains. They will be located in remote and rocky canyons that are inaccessible by vehicles.

Combined, the six guzzlers will increase the water available for wildlife such as fox, coyote, chukker, owl, red tail hawk, and other small animals. Barriers and signs will be installed around them to ensure vehicles are not driven near them.

- 14) *Conduct desert tortoise inventory transects in 15 sections of public land within the Management Area.*

Discussion: Transects will be 1.5 miles in length (triangle) and will be at the frequency of 1 per section. Animals will be visually inspected to determine the presence or absence of disease. In addition, a wildlife biologist will conduct a field inspection regarding the quality of habitat and the presence of desert tortoise sign along the northern edge of the Management Area boundary.

Field personnel for the United States Fish and Wildlife Service (USFWS) and the BLM agree that the likelihood of locating significant numbers of desert tortoise within the 24,400-acre Management Area is very low. Less than 100 animals are expected to be present. This needs to be verified by inventory. The location of the sections to be inventoried is based upon habitat on public land that still may contain tortoises. From this inventory, BLM will prepare a revised estimate of the total number of tortoises present within the Management Area. Tortoise numbers will be projected onto private land in circumstances where public and private land are intermixed.

- 15) *Mitigate impacts to desert tortoise based upon the total numbers of tortoise present within the Management Area.*

Discussion: This and the above management action items are the result of extensive dialogue between the United States Fish and Wildlife Service, the California Department of Fish and Game, and the BLM. The Bureau has "conferred" with the CDFG and initiated formal "section 7 consultation" as per the Endangered Species Act relative to the Management Plan and the actions affecting the desert tortoise. A no-jeopardy opinion is expected from the USFWS.

Mitigation will be initiated based upon the number of tortoise within the Management Area. Four levels of mitigation have been defined from which the appropriate level will be chosen. Successive levels of mitigation are cumulative with lower level(s) e.g., level 3 mitigation = level 1 + level 2 + level 3.

Level 1 Mitigation (Overall tortoise numbers: 1 - 99 animals)

- 1-1. Conduct routine Ranger patrols of the area surrounding the Management Area to assure compliance with Federal, State and County laws and regulations relative to unauthorized OHV use, trespass, and the Endangered Species Act.

1-2. Initiate a two-phase effort to remove all desert tortoises from the Management Area.

1-3. Advise the Service on an annual basis of the estimated number of tortoise taken from within the Management Area.

1-4. Assist the California Desert District in developing a Cooperative Management Agreement with the California Department of Fish and Game to establish a habitat-wide captive breeding and/or relocation program for the desert tortoise.

Rationale: The success of the El Mirage Cooperative Management Area to a large extent is based upon the ability of the BLM to eliminate historic use within the 100,000-acre defacto "open area" and contain and confine use within the boundaries of the 24,400-acre Management Area. The accomplishment of this objective is the backbone of the Management Plan. Accomplishment of this objective will not only result in a reduction of the potential for adverse impacts to desert tortoise outside of the Management Area, but unauthorized trespass and OHV disturbances in surrounding communities will also be reduced or eliminated.

The entire boundary of the Management Area will be fenced with one of two types of fencing. Along the southern border post and wire cable will be utilized. The purpose of this fence in this location is to physically contain use to within the Management Area boundary. Currently many visitors access the dry lake by trespassing across private land within the Community of El Mirage. The east, northern, and western boundary will be fenced with "T" post and smooth wire. This fence will serve primarily to delineate the edge of the Management Area.

The post and wire cable will separate the Community of El Mirage from the Management Area. The top of the posts may serve as perching sites. No anti-perching devices are proposed for this portion of fence because it is adjacent to urban development and is miles from existing desert tortoise habitat.

The "T" post and wire fence along the northern boundary is the closest to Category II (interim) desert tortoise habitat north of Shadow Mountain Road. The "T" post and smooth wire fence does not provide perching sites for predatory birds such as ravens and raptors. The wire is too thin and the top of the "T" posts provide little opportunity for perching. However, posts used in stress and corner panels within this fence will be capped with a "conical" device that eliminates opportunities for perching.

Based upon the assumption that intensive OHV play and tortoise management are not compatible, any individual animals that exist within the El Mirage Cooperative Management Area will be retrieved. The first phase of the removal effort (1-3 years) will consist of passive removal. Via visitor contacts and the distribution of printed material, visitors to the El Mirage Cooperative Management Area will be informed of conservation measures and the protected status of the desert tortoise. Any animals collected by BLM or inadvertently collect by visitors, will be turned over to CDFG according to existing procedures. During this first phase, overall visitor use of the El Mirage Cooperative Management Area is not expected to increase.

The current level of total annual "take" of desert tortoise within the Management Area is estimated to be less than 10 individuals. This "take" level should decline during this first phase of the removal effort due to increased education and citations.

BLM and volunteer staff present within the El Mirage area have documented approximately 15 desert tortoise being collected by visitors over the last six years. Approximately seven dead desert tortoises have been identified during these same six years. An average of about six live tortoises have been observed annually.

This request for formal consultation assumes that "total take" for the El Mirage Cooperative Management Area is equal to the total number of tortoise determined to be present from the results and analysis of the aforementioned inventory. However, on an annual basis, the BLM will advise the Service of the estimated "annual take" of desert tortoise from within the Management Area. This will include those animals given to CDFG as well as the number of dead animals observed by BLM staff and volunteers.

The second phase of the removal effort will be tied closely to a captive breeding and/or relocation program to be established with CDFG. Such a breeding and relocation program is built upon the assumption that it is a common goal of BLM, CDFG, and the US Fish and Wildlife Service to take all reasonable action to "de-list" the desert tortoise by, among other things, reestablishing viable populations in quality habitat.

The "total take" of tortoise for the El Mirage Cooperative Management Area will be significantly reduced by implementation of the second phase of the removal effort in addition to ongoing passive removal. The second phase (years 4-5) of the removal effort will include an annual systematic

collection of remaining desert tortoises. This collection effort will be conducted under the auspices of BLM during the spring when tortoise are active. For two successive years, areas identified in the inventory to contain desert tortoise will be swept. Tortoise will be collected and either placed in a holding area (captive breeding facility) or immediately relocated to quality habitat within the California Desert Conservation Area.

The responsibility for the development of a captive breeding and/or relocation program lies with CDFG. Its success is dependant upon many other factors. Such things as the procedural details for the identification of vacant tortoise habitat within Categories I and II must be completed. The habitat management plan for the west Mojave desert tortoise population must also be completed prior to the initiation of the second phase of the removal effort. Animals removed during the second phase of the removal effort will be handled in accordance with specifics contained in the habitat management plan.

Potential take: The maximum potential take of desert tortoise under Level 1 Mitigation is 99 animals. This level of take will be substantially reduced by implementation of the relocation and/or captive breeding program.

Currently the level of annual take of desert tortoise within the Management Area is estimated to be less than 10 individuals.

Level 2 Mitigation (Overall tortoise numbers: 100 - 249 animals)

2-1. Where groups of tortoise (or sign) are located in groupings of 20 or more along the northern boundary, construct segments of tortoise proof fencing to prevent the migration of animals back into the Management Area.

2-2. After construction of the boundary barricade, physically move any tortoises located inside the Management Area (within 300 yards of the barricade) to the outside of the Management Area.

Rationale: The entire Management Area will be fenced with a boundary barricade. Where tortoises are located along the boundary, it is reasonable and appropriate to construct the fence in such a manner that tortoises will not be able to move back into the Management Area. Fencing the entire boundary (approximately 40 miles) with tortoise proof fence is not necessary or cost-effective.

A decision will be made by BLM, in coordination with the USFWS, during the construction of the individual fence segments to minimize the likelihood of tortoises being able to migrate around the ends of the fence. Such things as topography, terrain, and soil type will be considered.

Potential take: The maximum potential take of desert tortoise under Level 2 Mitigation is 249 animals. This level of take will be substantially reduced by implementation of the relocation and/or captive breeding program.

Level 3 Mitigation (Overall tortoise numbers: 250 - 499 animals)

3-1. Fund either the rehabilitation of surface disturbances within Category I and II desert tortoise habitat or contribute to the development and/or management of a captive breeding facility in an amount not to exceed \$20,000 for each of three years.

Rationale: The western Mojave habitat management plan will address the appropriateness and amount of vehicle access in each of these categories. The area north of Shadow Mountain Road will be included in this analysis.

It is anticipated that duplicate access routes in high quality desert tortoise habitat will be closed and rehabilitated. The routes of travel themselves are not necessarily adversely impacting the tortoise and its habitat. It is, however, the increased accessibility of remote populations of tortoises and their habitat that may necessitate putting such duplicate routes of travel to "bed."

A captive breeding program may be critical in the long-term recovery of the desert tortoise. Thus, it may be more important to fund such a program instead of rehabilitating existing habitat. It is not appropriate at this time to specifically designate where these dollars should be used. They will be set aside and made available for the implementation of actions in the habitat management plan for the west Mojave desert tortoise population.

Potential take: The maximum potential take of desert tortoise under Level 3 Mitigation is 499 animals. This level of take will be substantially reduced by implementation of the relocation and/or captive breeding program.

Level 4 Mitigation (Overall tortoise numbers: 500 plus animals)

4.1 Construct a continuous tortoise proof fence, either around the northern boundary of the Management Area or north of Shadow Mountain road, to prevent the migration of tortoises back into the Management Area.

Rationale: The area north of Shadow Mountain Road is identified as Category II desert tortoise habitat and is proposed as a "Consolidation Zone" for the Western Mojave Land Tenure Adjustment Project. It is reasonable to assume that this area may be identified in the habitat management plan as a potential recipient site for relocated animals. At this time it is not appropriate to determine if the tortoise proof fence should be constructed as an integral part of the barricade along the northern boundary of the Management Area or if it should be constructed north of Shadow Mountain Road. The habitat management plan will address this question.

Potential take: The maximum potential take of desert tortoise under Level 4 Mitigation will be determined by inventory. However, as with each of the other levels of mitigation, the take will be substantially reduced by implementation of the relocation and/or captive breeding program.

- 16) *Conduct an extensive random stratified inventory within the Management Area (under contract) to determine if the Mohave Ground Squirrel is present, and if so, where and in what densities.*

Discussion: The Management Area contains lands that are identified as the historic home range for the Mohave ground squirrel, a State-listed threatened species. The BLM has "conferred" with the CDFG, and actions numbers 16 and 17 reflect the results of this dialogue.

A possibility of two scenarios will exist as a result of the above action. Either:

- (a) There are no Mohave Ground Squirrels within the Management Area, or
- (b) There are Mohave Ground Squirrels present.

If no Mohave ground squirrels are located within the Management Area then information relative to this species will be contained within the literature, and no further action will be taken. However, if a population of the Mohave ground squirrels is located within the Management Area, then management action 17 will be implemented.

- 17) *Intensively inventory, monitor, and take the appropriate actions to maintain populations of Mohave ground squirrel identified within the Management Area.*

Discussion: Intensive inventories will be conducted, under contract, to determine the actual extent of any identified populations. This inventory may be piggy-backed upon the extensive inventory identified in action 16.

A monitoring program to determine trend will be developed contingent upon locating a viable population of Mohave ground squirrels. Such a monitoring program will be developed with input from CDFG standards.

If an existing population within the Management Area exhibits a downward trend, the impacts will be mitigated by one or more of the following measures:

- (a) Modify the perimeter boundaries.
- (b) Construct exclosures around specific populations.
- (c) Impose seasonal visitor use restrictions for portions of the Management Area.
- (d) Restrict OHV use to designated roads and trails within a portion of the Management Area.
- (e) Trap and relocate identified populations.
- (f) Place emphasis on protecting squirrels in the written and interpretive material distributed to visitors.

Soil Management

- 18) *Establish a monitoring system to determine the approximate amount of soil loss from different soils within the Management Area. After monitoring for five consecutive years a baseline will be established for an acceptable level of on site soil loss.*

Discussion: The various soil types within the Management Area have been mapped and classified according to type and erosion factor. The current level of soil loss is unknown. This action will monitor the various soil types in an attempt to quantify the approximate loss by year.

Five years of monitoring will provide adequate data from which to establish a baseline level of on site soil loss. The baseline will be used in a comparison with the soil loss for any given year to detect increases, or decreases, in soil loss as visitor use levels fluctuate.

- 19) *Implement conservation repair measures as necessary within the Management Area for the prevention of excessive erosion, and for making repairs to the soil where damage is unacceptable.*

Discussion: Conservation measures will be implemented where erosion and soil loss are observed and obvious, prior to establishing a baseline soil loss standard. After the standard is established conservation measures will be implemented where necessary according to data generated from the monitoring program.

Conservation repair measures may include the following:

- (a) Rerouting trails.
- (b) Hardening trails and roads.
- (c) Maintaining trails.
- (d) Installing water bars along routes of travel.
- (e) Planting vegetation.
- (f) Imposing temporary use restrictions (area & trail).
- (g) Installing barriers.
- (h) Imposing speed limits.
- (i) Providing visitor education and enforcement.

E. INFRASTRUCTURE DEVELOPMENT

Roads

- 1) *Pave the main entrance road from El Mirage Road to the location of the headquarters complex.*

Discussion: This is the main access road leading into the Management Area, and has been used as such since 1985 (Illustration 8). The portion to be paved is approximately 2.5 miles in length and accesses the most popular camping and staging areas. Use will be restricted to street legal vehicles.

- 2) *Maintain Mountain View Road, Twin Hills Road, and Lake Road as graded dirt roads.*

Discussion: These are primary roads and will serve as the main access net within the Management Area. These roads will be maintained on a regular basis. All types of vehicles will be allowed to use these roads.

Mountain View Road will have both paved and unpaved sections. It will be paved for two miles north from El Mirage Road to Desert Flower Road. From here it will be a maintained dirt road for an additional three miles north to where it connects with Twin Hills Road.

Twin Hills Road is a connector road between Mountain View Road and the east entrance to the Management Area. This will be a maintained dirt road for five miles within the Management Area.

Lake Road is an existing bypass road around the north side of the lakebed that will be improved. The first 1/2 mile from Mountain View Road west to the entrance of the headquarters complex will be paved, the remainder will be maintained as a dirt road.

- 3) *Improve and maintain a system of secondary access routes branching off from the main access roads into the heavy use and popular camping areas.*

Discussion: These routes will be maintained to allow access by primary vehicles into the most popular camping and staging areas. These routes will be identified and maintained at the discretion of the Project Manager. A current network of roads put in by private developers will form the core of this route system.

These routes will be maintained approximately 14 feet wide and for a speed limit of 15 MPH. This system will expand with time as the Management Area receives additional use.

Traffic Control

- 4) *Implement speed limits on primary roads and secondary routes throughout the Management Area.*

Discussion: Speed limits are necessary to control use and maintain a safe environment. The following speed limits will be posted:

- (a) 50 MPH Paved section of Mountain View Road to within 300' of the entrance.
- (b) 25 MPH Mountain View Road, 100' from the entrance station to the intersection with Twin Hills Road.
- (c) 25 MPH Lake Road, entire road.
- (d) 25 MPH Twin Hills Road, entire road.
- (e) 15 MPH Within 100' of entrance station.
- (f) 15 MPH In popular staging & camping areas.

A speed limit of 15 MPH will be in effect on all secondary access routes leading into the primary staging areas. All speed limits will be reviewed on a regular basis to determine appropriateness.

- 5) *Install barriers along the primary access roads where necessary to ensure smooth traffic flow, to limit OHV cross-traffic, and to enhance OHV rider safety.*

Discussion: Installing barriers may prove necessary along the paved portion of Mountain View Road, and some segments of the other primary access roads, to limit the amount of OHV cross traffic. The barriers may also be necessary near heavily used staging areas to prevent young OHV riders from accidentally straying out on roads. Where barriers are installed controlled intersections will be created to allow cross-traffic.

Perimeter Barrier

- 6) *Construct a permanent barrier around the perimeter of the Management Area, with all openings controlled.*

Discussion: Two types of barriers (wire rope & smooth wire) have been identified for use, depending on the need and the terrain. The wire rope barrier will be constructed with three strands of 3/8 to 5/8 inch wire rope strung on post of either railroad ties, telephone poles, or well casing. The smooth wire fence will have three to five strands of smooth wire supported by metal T-posts.

The wire rope barrier will be installed around the southern boundary where the Management Area shares a border with the community of El Mirage. In this area there is a need to construct a barrier that will physically contain use. Along the east, north, and west boundary the primary purpose of the barrier is to identify the boundaries.

The final determination on the type of barrier will be based upon the availability of material, and/or the use of volunteers or contractors. The final design will also depend upon the need (if any) to mitigate potential impacts to wildlife. The entire perimeter barrier will be appropriately marked with reflective material. Gates will be strategically located in the barrier to allow access for emergency vehicles (Illustration 8).

Entrance Stations

- 7) *Construct a permanent entrance station on Mountain View Road.*

Discussion: Year-round access will be through the main entrance station on Mountain View Road. The entrance station will be open 24 hours per day. Voluntary fee collection materials will be available for when the station is not staffed. The building will likely be pre-fabricated and will have the following capabilities:

- (a) 110V power and restroom capability.
- (b) Lights, air conditioning, heating.
- (c) Telephone and radio.
- (d) Cash register.
- (e) Flagpole.

The entrance station and visitor contact station will both have pay phones available for public use to ensure visitors the opportunity to report emergencies.

- 8) *Acquire two portable fee collection buildings for use at the east and west entrance stations, and develop a site at the east and west entrances for the buildings.*

Discussion: The east and west entrances will be open only during key holiday weekends, at which time portable fee collection buildings will be located at these entrances. The site for the portable entrance stations will be developed to include power and a level pad to park the building.

Restrooms

- 9) *Construct five restrooms within the Management Area.*

Discussion: Restrooms are necessary due to the high amount of day use and the large number of visitors who use the area but do not have self-contained recreational vehicles. The restrooms will be located where the majority of visitors have historically camped.

The restrooms will be self-contained vault toilets, preferably the waterless type where regular pumping is not required. The design of the restrooms will allow for future expansion with the addition of stalls to the existing structure. The restrooms will be installed at the following locations (Illustration 8) and will have the listed capacity:

#1 Main entrance.....	6 stalls
#2 Site of the Hess Ranch.....	4 stalls
#3 Bella Vista Road.....	4 stalls
#4 Sailors Bay on the lakebed....	4 stalls
#5 Twin Hills.....	4 stalls

Headquarters Complex

- 10) *Develop a series of buildings and facilities at a central location for use as a headquarters complex.*

Discussion: See Illustration 8 for location of the headquarters. The headquarters complex will contain the following facilities:

- (a) First aid/visitor contact station.
- (b) Maintenance shop.
- (c) Vehicle storage building.
- (d) Office building.
- (e) Heliport.
- (f) Visitor & employee parking.
- (g) Water reservoir.
- (h) Fuel storage.

These are the facilities required to manage visitor use, provide visitor services, and house the staff of the Management Area. Not all of the above facilities are identified as specific items within the implementation table. The engineering and architectural design for the entire headquarters complex will be completed at one time.

Such facilities as the office building, maintenance shop and fuel storage will be constructed first. Other facilities will be constructed when either: 1) funds become available, 2) Management Area staff have the time during slow use periods, and/or 3) volunteer time and money is available.

All the facilities at the headquarters complex will be located in one compound to simplify maintenance, to provide a centralized work environment, and to enhance security of government property. Secure parking will be provided for employee vehicles.

A main office building will be constructed to provide working space for the staff of the Management Area. This building will include separate restroom facilities for male and female that are equipped with showers and lockers. This will facilitate the staff needs for personal hygiene when doing physical labor in the field or when patrolling on OHVs during the summer.

Options will be explored for a visitor contact station. The options under consideration include a prefabricated building, a mobile trailer, or the renovation of an existing building. First aid and visitor information will be provided at the visitor contact station, with the heliport serving as an evacuation point for seriously injured visitors. Parking will be provided for visitors driving OHVs or regular vehicles.

A maintenance shop will be constructed to provide working space for light maintenance of vehicles and equipment. The vehicles and equipment will be stored inside to protect them from the weather and vandalism.

The water reservoir will be available for filling water trucks used to repair damaged portions of the lakebed. Pre-positioning water in a storage reservoir will allow several trucks to be filled in a short period of time. This will also provide a water source for fire suppression efforts. To the extent possible, an existing reservoir at the site of the headquarters will be used.

Fuel storage will be developed to fill vehicles and equipment on site. This reduces employee exposure to the safety hazard of carrying fuel in cans back and forth from a service station. It also saves considerable work time which would otherwise be lost. The nearest service station that accepts a government credit card is thirty minutes away.

Communications

- 11) *Develop a radio system that will facilitate two-way communication among all field personnel, the headquarters, the entrance stations, and the dispatching facilities at the Interagency Communication Center.*

Discussion: The radios will have multiple frequencies with the capability to contact the Interagency Communication Center and other agency field units. The initial design for the radio system includes a low power repeater for use within the Management Area, a base radio at the headquarters, radios in all the vehicles, a radio at the entrance, and a cache of hand held radios for field personnel.

F. MAINTENANCE

Facilities

- 1) *Maintain facilities as needed to ensure they are always functional and in good condition.*

Discussion: Facilities will be designed primarily for the ability to function with a minimum of maintenance. Facilities will be maintained by Management Area personnel unless a particular task is beyond the staff's ability, or other arrangements have been made (i.e. volunteers).

The restrooms will be pumped at least once a year, if they are not the waterless type. Lime, or a similar odor retardant, will be added to the restrooms on a regular basis to reduce the odor. Trash generated at the headquarters complex will be hauled to the county dump on a weekly basis by personnel assigned to the Management Area.

A sandblaster will be utilized for removing graffiti from the buildings and natural features of the landscape (rocks).

Materials will be stored at the headquarters complex for repairs on the Management Area barriers. The signs and material designed to make motorist aware of the perimeter barrier will be maintained as part of the barrier. Damage to a barrier will be repaired in a timely fashion by either:

- (a) The offender.
- (b) Volunteers.
- (c) Personnel from the Management Area.

Roads

- 2) *Maintain the primary road network inside the Management Area, including the access roads on a regular basis.*

Discussion: Primary roads (non-paved) will be maintained through a private contract or by San Bernardino County. These roads will be graded regularly. Between gradings the Management Area tractor will be used to make minor repairs to these roads as needed. The paved portion of Mountain View Road will also be maintained through a private contract, or by San Bernardino County.

The primary access roads (non-paved) will be maintained to the following specifications:

- (a) The roads will be approximately 28 feet wide and will accommodate two way traffic.
- (b) Berms will be kept to a minimum on both sides of the roads.
- (c) All rocks and dirt clods larger than two inches will be removed from the road surface.
- (d) The roads will have a center crown, grade permitting.
- (e) Culverts will be installed, and fill material or turf blocks will be used to stabilize a road base wherever needed.
- (f) Roads will be maintained in a condition that will allow vehicles to travel at approximately 25 MPH.

3) *Maintain secondary access routes and trails on a limited basis.*

Discussion: Secondary access routes into heavily used camping areas will be maintained by Management Area personnel in a condition that will allow their use by primary vehicles. These routes may be only one vehicle width, and will be maintained for approximately a 15 MPH speed limit. Turnouts will be provided.

A network of existing OHV trails will be maintained on a limited basis. Trails will be identified for maintenance in the following situations:

- (a) Proliferation of new trails around a section of trail damaged or covered with very large whoop-de-dos.
- (b) Popular trails located in or adjacent to heavily used camping areas where the speed limit is 15 MPH.
- (c) Strategic trails that are located in a pass or a narrow section of the Management Area where a limited number of alternative routes exist.
- (d) Existing large wide trails that serve as key routes of travel for OHVs throughout the Management Area.
- (e) Trails located on sensitive soils.

Select routes and trails must be maintained to ensure visitors access into and throughout the Management Area. The Management Area tractor is not designed or equipped to maintain the primary roads. It will be capable of maintaining some of the secondary routes which do not require as much work. Some trail maintenance will require the use of other types of equipment, which will either be borrowed or rented on an as needed basis.

Trails that are maintained will allow the average rider to use them. The majority of trails will not be maintained to create the widest possible variety of riding experiences.

Communications

- 4) *Maintain the communication network for continuous operation on a 24 hour basis.*

Discussion The Management Area radios will be maintained under contract to a private vendor.

Hazard Reduction

- 5) *Remove all nonnatural installations where possible and mitigate the hazardous effects of others.*

Discussion: The known list of such installations includes:

<u>Installation</u>	<u>Location</u>
(a) Cement culvert	T.6N., R.6W., SW1/4 Sec. 8
(b) Steel post	T.6N., R.6W., W1/2 Sec. 8
(c) Rocks set in cement	T.6N., R.6W., W1/2 Sec. 8
(d) Cement foundation	T.6N., R.6W., N1/2 Sec. 7
(e) Cement foundation	T.6N., R.7W., S1/2 Sec. 3
(f) Cement foundation	T.6N., R.7W., S1/2 Sec. 4
(g) Well shafts	Various
(h) Mine shafts	Various

Abandoned mine shafts and open wells within the Management Area will either be filled or fenced.

Off-highway vehicle "worm track" courses will be allowed to develop and remain in the immediate vicinity of popular camping and staging areas where the prima-facia speed limit is 15 MPH. All other such courses will be obliterated to reduce the chance of an accident occurring.

G. MONITORING

Recreation Activities

- 1) *Monitor the recreation setting within the Management Area to ensure the quality of the recreation experience is meeting visitor needs.*

Discussion: The level and type of services that will be provided are intended to assure continuance of high quality recreational experiences for the next ten years. An assumption was made that during this time the Management Area could provide recreation opportunities for approximately 450,000 visitor use days (VUDs) per year. After this point there would be unacceptable levels of conflicts among the various activities. An assumption was also made that use would occur in a pattern similar to present use (i.e., 20% of all use in May, 45% of use occurring on Sunday).

Monitoring data will be collected from the following sources:

- (a) Visitor counts taken at the entrance stations.
- (b) Accident reports.
- (c) Violation notices, both warnings and citations.
- (d) Incident reports.
- (e) Patrol logs.
- (f) Permit compliance checks.
- (g) Aerial photographs.
- (h) Correspondence with individuals and groups.
- (i) Visitor surveys.

Data will be assimilated each August for the preceding year as follows:

- (a) Visitor counts will be broken down into use counts for the following totals:
 - Total annual use
 - Seasonal use
 - Weekend use
 - Weekend day use
 - Holiday use
 - Week day use
- (b) Accident reports will be broken down into injury, non-injury, and fatal categories.
- (c) Incidents reported in violation notices, incident reports, correspondences, and patrol logs will be compiled into one of the following categories:
 - 1. Violations.
 - 2. Accidents.
 - 3. Conflicts between activities.
 - 4. Destruction of natural resources.

Monitoring data will be analyzed to detect patterns and associated impacts. Results will be used as feedback for making adjustments in the affected areas (i.e., signing, interpretive programs, brochures, patrols,) as necessary.

The monitoring program is designed to detect deterioration of the quality of the recreation experience. When either the target use level is reached and/or the recreation experience deteriorates, the Management Plan will be re-examined to determine if the management actions need to be modified. Such modifications will likely include:

- (a) Appropriateness of zoning use on the lakebed.
- (b) Number and type of personnel.
- (c) Number and type of facilities.
- (d) Possible expansion of the Management Area.
- (e) Restrictions of specific activities.

- 2) *Monitor both public and private land within the zone of influence to ensure that the management actions in this plan are resolving the recreation related issues.*

Discussion: Monitoring both within and around the Management Area will be an on-going effort to make sure the following issues are being satisfactorily resolved:

- (a) Trespass on private property is kept to a minimum.
- (b) Littering and trash accumulation are kept to a minimum.
- (c) Sewage is disposed of properly.
- (d) Route proliferation and adverse OHV use patterns are controlled.

Monitoring data will be compiled from the same sources as in action 1 above.

Natural Resources

- 3) *Monitor the lakebed for changes in size, invasion of vegetation, and the development of cracks, holes, or depressions.*

Discussion: The size and condition of the lakebed will be monitored with routine patrols and aerial photographs taken every two years. Holes, depressions, cracks, vegetation and mounds will be plotted on topographic maps, and then confirmed through field inspections. The appropriate mitigation steps will then be taken to ensure both the integrity and the historic size of the lakebed surface.

- 4) *Monitor vegetation within the Management Area to detect changes in cover, and to observe changes in the population of Joshua trees.*

Discussion: Sudden or dramatic change in vegetative cover will alter visitor patterns, affect erosion and water runoff, and change the recreational experience. Initially, monitoring will consist of examining successive aerial photos and field observations of cover patterns. If necessary, photo or ring plots will be established for more accurate measurements.

Areas experiencing changes in vegetation will be analyzed in conjunction with soil type to determine if the area in question is capable of tolerating such use. The appropriate mitigation measures will then be taken to make certain that vegetative cover is maintained.

- 5) *Monitor and classify the air quality around the lakebed to determine the appropriate management actions to be taken relative to the amount of fugitive dust.*

Discussion: A series of 36" diameter "visibility" discs will be installed at three points along the perimeter for use in monitoring visibility during wind storms. During wind storms the visibility disks will be monitored regularly and the results classified according to chart 2. Stages 2, 3, and 4 require specific management actions to be placed into affect (section IIID, Air Quality).

The air quality will be classified according to chart 2 as follows:

CHART 2

Stage	Classification	Wind	Visibility	Dust clouds
1	Minor dust	>20mph	< 200'	few, small
2	Moderate dust	>25mph	< 100'	few, moderate
3	Major dust	>30mph	< 50'	large clouds
4	Critical dust	>35mph	< 25'	total dust

Definition of variables:

Wind..... Average wind speed excluding gust.

Visibility... Relative visibility within the Management Area determined at monitoring stations.

Dust clouds.. Another form of classification for the size of the dust cloud, this may vary from one or two individual dust devils to one large dust cloud.

H. ADMINISTRATION

Management Responsibilities

- 1) *Manage the El Mirage Cooperative Management Area as a joint venture among the Bureau of Land Management, the State Department of Parks and Recreation, the OHMVR Commission, and the counties of San Bernardino and Los Angeles.*

Discussion: The El Mirage Cooperative Management Area is a joint venture among five parties. The Interagency Agreement signed in November, 1988 defines the roles of each party. The following is a summary of the roles each party will play in the development and management of the El Mirage Cooperative Management area:

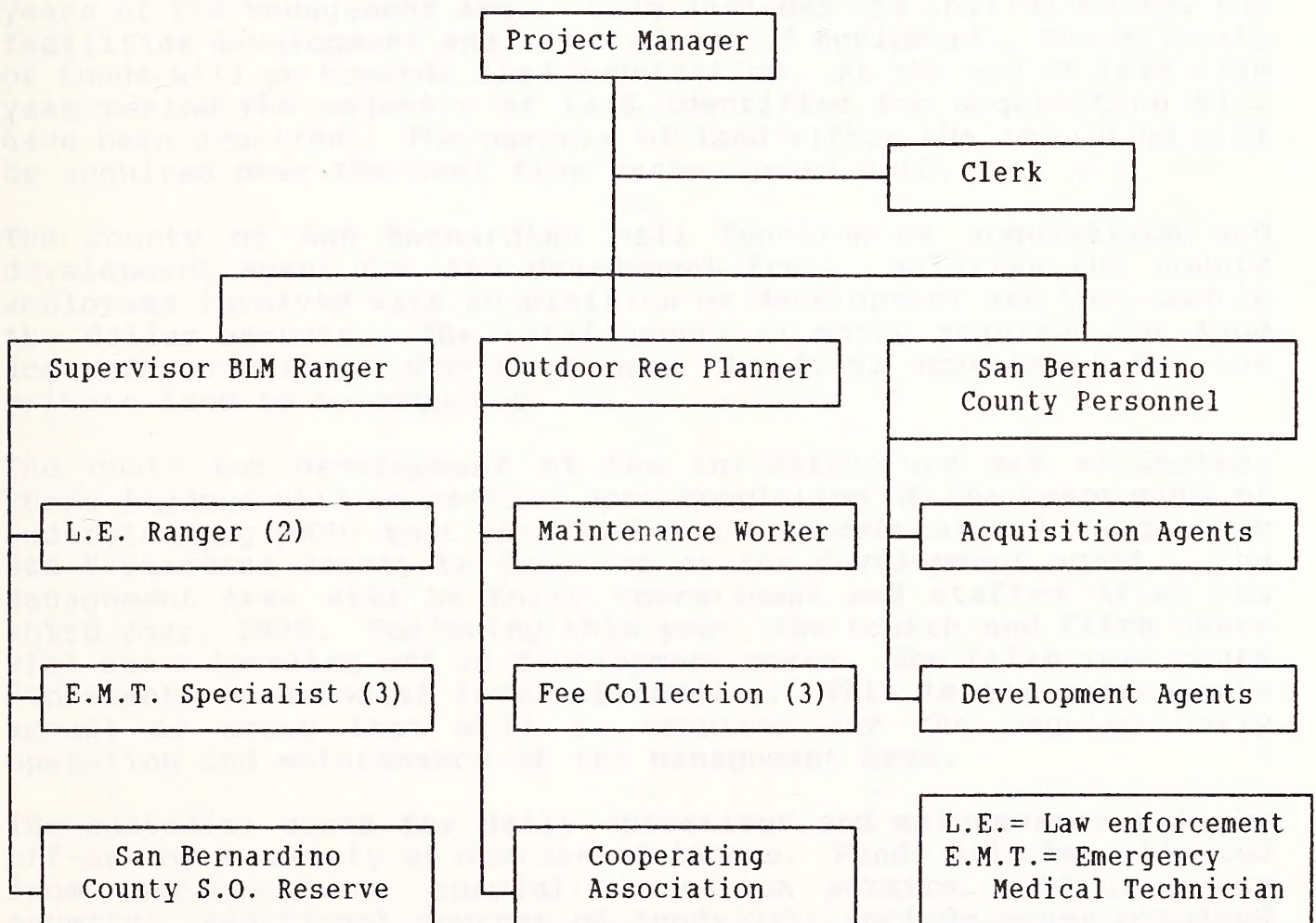
Party	Role
<u>BLM</u>	<ul style="list-style-type: none"> * Function as lead agency. * Prepare management plan. * Make approximately 12,000 acres of public land available to the Management Area. * Apply for OHV grants and distribute monies to cooperating agencies as mutually agreed upon. * Provide funding for permitting and compliance of mineral, grazing, and commercial filming activities with Bureau appropriated funds.
<u>State of California & OHMVR Commission</u>	<ul style="list-style-type: none"> * Provide funding for activities related to OHV use in the El Mirage Management Area and surrounding zone of influence.
<u>San Bernardino County</u>	<ul style="list-style-type: none"> * Serve as acquisition agent for the Management Area. * Serve as facility development and construction agent for the Management Area. * Continue to maintain county roads. * Continue to enforce state and county laws. * Delegate authority to BLM Rangers to enforce state and county laws related to OHV use. * Apply for monies that might be available to benefit the Management Area.
<u>Los Angeles County</u>	<ul style="list-style-type: none"> * Continue to maintain county roads. * Continue to enforce state and county laws. * Apply for monies that might be available to benefit the Management Area. * Provide avenues for public advertisement of the Management Area and education of visitors.

Staffing

- 2) Hire a permanent staff consisting of full time and part time personnel to operate the El Mirage Cooperative Management Area.

Discussion: The following positions have been identified to implement the actions contained in this Management Plan.

ORGANIZATION CHART



A staffing plan for the Management Area is on file in the Barstow Resource Area Office (approved August 12, 1988). The staffing plan contains a complete description of the roles, responsibilities, and tour of duties for each position.

Upon completion, the Management Area headquarters complex will serve as the official duty station for the BLM staff. All personnel, vehicles, and equipment will be located at the headquarters. Space will be allocated at the headquarters complex for use by members of the Cooperating Association. The positions

related to acquisition and development will be located within the County of San Bernardino. Reserve Deputies assisting with law enforcement in the Management Area will continue to operate out of the Sheriff's Office.

IV. COST ESTIMATES AND IMPLEMENTATION SCHEDULE

A. COST ESTIMATES

The implementation schedule reflects the approximate cost, and the sequence for development, that will occur during the first five years of the Management Area. This includes the initial outlay for facilities development and major pieces of equipment. The majority of funds will go towards land acquisition. At the end of this five year period the majority of land identified for acquisition will have been acquired. The parcels of land within the inholding will be acquired over the next five years, years 6-10.

The county of San Bernardino will function as acquisition and development agent for the Management Area. Salaries for County employees involved with acquisition or development are included in the dollar amounts. The total amount of money required for land acquisition will be dependent upon the final appraisals for the private land to be acquired.

The costs for development of the infrastructure are estimates. These figures will be refined upon completion of the memorandum of understanding (MOU) that establishes the procedures and details for San Bernardino County to function as the development agent. The Management Area will be fully operational and staffed after the third year, 1992. Following this year, the fourth and fifth years will see a leveling off in development costs. The fifth year costs represents a custodial level of funding. This is the approximate amount of money that will be required for the ongoing daily operation and maintenance of the Management Area.

The custodial costs for daily operations and maintenance will be off-set by a variety of sources of income. Funds will be collected from entrance fees, special recreation permits, and land use permits. Additional sources of funds will include money obtained through other grants, BLM appropriated funds, special assessment fees for commercial activities that require permit compliance checks, funds collected through the courts for acts of vandalism, donations, and the use of volunteer efforts.

B. IMPLEMENTATION SCHEDULE

The following table represents the cost estimates by year associated with implementation of the Management Plan.

MANAGEMENT ACTIONS		COST BY YEAR					WM	COST
		FY 90	FY 91	FY 92	FY 93	FY 94		
LAND TENURE ADJUSTMENT								
1. Land acquisition ¹	WM	\$2.452	\$1.750	\$1.750	\$1.750	\$1.750	9.452	
	PROC	—	—	—	—	—		\$0
2. Route designation	WM	4.0	1.0	1.0	1.0	1.0	8.0	
	PROC	—	—	—	—	—		\$0
3. Mineral Withdrawals	WM	—	0.5	—	—	—	0.5	
	PROC	—	—	—	—	—		\$0
USE PERMITS								
SRPs and LUPs	WM	1.0	1.0	1.0	1.0	1.0	5.0	
	PROC	—	—	—	—	—		\$0
VISITOR MANAGEMENT								
1. Provide L.E. services	WM	18.0	18.0	18.0	22.5	16.5	93.0	
	PROC	\$7,300	*	*	*	*		\$7,300
2. Provide EMT services	WM	7.0	11.0	19.0	20.0	20.0	77.0	
	PROC	\$2,000	\$2,000	\$2,000	\$2,000	\$2,000		\$10,000
3. Collect entry fees	WM	—	—	20.0	20.0	20.0	60.0	
	PROC	—	—	*	*	*		\$0
4. Support services	WM	7.0	6.0	4.0	2.0	2.0	21.0	
	PROC	—	—	—	—	—		\$0
5. Signs	WM	2.0	2.0	2.0	2.0	2.0	10.0	
	PROC	\$10,000	\$15,000	\$10,000	\$10,000	\$10,000		\$55,000
6. Visitor contact station	WM	—	3.0	3.0	3.0	3.0	12.0	
	PROC	—	\$15,000	\$20,000	—	—		\$35,000
7. 24 hour message phone	WM	—	—	—	—	—	0.0	
	PROC	—	—	\$200	—	—		\$200
8. Develop area brochure	WM	1.0	2.0	—	0.5	—	3.5	
	PROC	\$200	\$200	—	\$200	—		\$600
9. Develop interp brochure	WM	—	2.0	1.0	1.0	0.5	4.5	
	PROC	—	\$200	\$200	—	\$200		\$600
10. Print brochures	WM	1.0	2.0	—	1.0	—	4.0	
	PROC	\$4,800	\$9,600	—	\$9,800	—		\$24,200
11. Develop cultural resource	WM	—	1.0	1.0	—	—	2.0	
	PROC	—	*	*	—	—		\$0
12. Volunteer program	WM	1.0	1.0	1.0	1.0	1.0	5.0	
	PROC	\$800	\$800	\$1,000	\$1,000	\$1,000		\$4,600

¹Cost represents millions (i.e. 1.750 = 1,750,000).

MANAGEMENT ACTIONS		COST BY YEAR					WM	COST
		FY 90	FY 91	FY 92	FY 93	FY 94		
RESOURCE PROTECTION								
1. Close lakebed when wet	WM	3.0	3.0	3.0	3.0	3.0	15.0	
	PROC	--	--	--	--	--		\$0
2. Fence east end of lk bed	WM	--	--	2.0	--	--	2.0	
	PROC	--	--	*	--	--		\$0
3. Maintain lk bed surface	WM	1.0	1.0	1.0	1.0	1.0	5.0	
	PROC	*	*	*	*	*		\$0
4. Vegetation management	WM	--	4.0	2.0	4.0	2.0	12.0	
	PROC	--	*	*	*	*		\$0
5. Cultural inventory	WM	2.0	2.0	1.0	1.0	--	6.0	
	PROC	--	--	--	--	--		\$0
6. Manage cultural sites	WM	--	2.5	2.0	2.0	2.0	8.5	
	PROC	--	*	*	*	*		\$0
7. Wildlife management	WM	8.0	4.0	4.0	4.0	4.0	24.0	
	PROC	\$45,000	*	*	*	*		\$45,000
8. Soil management	WM	--	1.0	1.0	1.0	1.0	4.0	
	PROC	--	\$3,000	--	\$3,000	--		\$6,000
INFRASTRUCTURE								
1. Perimeter barrier	WM	1.0	1.0	--	--	--	2.0	
	PROC	\$23,500	\$191,000	--	--	--		\$214,500
2. Restrooms	WM	1.0	1.0	1.0	--	--	3.0	
	PROC	\$15,000	\$45,000	\$15,000	--	--		\$75,000
3. Main entrance station	WM	--	1.0	--	--	--	1.0	
	PROC	--	\$20,000	--	--	--		\$20,000
4. East & west entrance stations	WM	--	--	1.0	--	--	1.0	
	PROC	--	--	\$35,000	--	--		\$35,000
5. Headquarters Complex	WM	2.0	4.0	--	--	--	6.0	
	PROC	--	\$150,000	--	--	--		\$150,000
6. Visitor contact station	WM	--	--	10.0	--	--	10.0	
	PROC	--	--	\$20,000	--	--		\$20,000
7. Pave entrance road	WM	2.0	--	--	--	--	2.0	
	PROC	\$500,000	--	--	--	--		\$500,000
8. Improve Lake Rd.	WM	--	1.0	--	--	--	1.0	
	PROC	--	\$60,500	--	--	--		\$60,500
9. Improve Twin Hills Rd.	WM	--	--	1.0	--	--	1.0	
	PROC	--	--	\$50,000	--	--		\$50,000
10. Communication System	WM	1.0	0.5	0.5	0.5	0.5	3.0	
	PROC	\$1,200	\$1,250	\$2,000	--	--		\$4,450
11. Hazard Reduction	WM	1.0	1.0	1.0	1.0	1.0	5.0	
	PROC	*	*	*	*	*		\$0
12. Facility Planning	WM	6.0	--	--	--	--	6.0	
	PROC	\$74,000	--	--	--	--		\$74,000

MANAGEMENT ACTIONS		COST BY YEAR						WM	COST
		FY 90	FY 91	FY 92	FY 93	FY 94			
MAINTENANCE									
1. Barriers	WM	—	1.0	1.0	1.0	1.0	4.0		
	PROC	—	\$1,000	\$1,000	\$1,000	\$1,000			\$4,000
2. Restrooms	WM	—	0.5	1.0	1.0	1.0	3.5		
	PROC	—	\$1,000	\$1,000	\$1,000	\$1,000			\$4,000
3. Entry station	WM	—	0.5	1.0	1.0	1.0	3.5		
	PROC	—	*	*	*	*			\$0
4. Headquarters complex	WM	—	4.0	4.0	4.0	4.0	16.0		
	PROC	—	\$1,500	\$7,000	\$6,000	\$6,000			\$20,500
5. Road grading	WM	1.0	1.0	1.0	1.0	1.0	5.0		
	PROC	\$25,000	\$25,000	\$32,000	\$32,000	\$32,000			\$146,000
6. Paved road	WM	—	0.5	0.5	0.5	0.5	2.0		
	PROC	—	\$18,000	\$18,000	\$18,000	\$18,000			\$72,000
7. Routes of travel	WM	—	1.0	1.0	1.0	1.0	4.0		
	PROC	—	\$500	\$500	\$500	\$500			\$2,000
8. Communication system	PROC	\$3,000	\$3,000	\$3,000	\$3,000	\$3,000			\$15,000
9. Tools & equipment	PROC	\$6,150	\$5,000	\$5,000	\$1,000	\$1,000			\$18,150
10. Supplies & materials	PROC	\$5,000	\$20,000	\$5,000	\$5,000	\$5,000			\$40,000
11. Equip repair & rental	PROC	\$4,000	\$4,000	\$4,000	\$4,000	\$4,000			\$20,000
MONITORING									
1. Recreation Use	WM	—	1.0	1.0	1.0	1.0	4.0		
	PROC	—	—	—	—	—			\$0
2. Aerial Photos	WM	1.0	—	1.0	—	1.0	3.0		
	PROC	\$7,000	—	\$7,000	—	\$7,000			\$21,000
ADMINISTRATION									
1. Administer agreement	WM	2.0	2.0	2.0	2.0	2.0	4.0		
2. Establish MOU W/S.O.	WM	2.0	—	—	—	—	2.0		
3. Training	PROC	\$2,000	\$3,000	\$3,000	\$3,000	\$3,000			\$14,000
4. Travel	PROC	\$3,000	\$3,000	\$3,000	\$3,000	\$3,000			\$15,000
5. Uniforms	PROC	\$2,000	\$1,500	\$3,450	\$2,000	\$2,000			\$10,950
6. Vehicles (milage & rental)	PROC	\$11,200	\$14,000	\$14,000	\$14,000	\$14,000			\$67,200
7. Office equip & supplies	PROC	\$7,500	\$2,000	\$2,000	\$2,000	\$2,000			\$15,500
SPECIAL EQUIPMENT									
1. Vehicles	PROC	\$49,800	\$16,600	—	—	—			\$66,400
2. Generator	PROC	\$2,500	—	—	—	—			\$2,500
3. Tractor	PROC	\$35,000	—	\$2,800	—	—			\$37,800
4. Equip Replacement	PROC	—	—	\$5,000	—	—			\$5,000

* This represents incidental cost associated with an action. An approximate amount of monies has been provided for these actions under general supplies and materials.

V. PLANNING PARTICIPANTS

A. LIST OF CONTRIBUTORS

Bureau of Land Management, California Desert District

David Mensing	Outdoor Recreation Planner
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Scott Eubanks	Realty Specialist

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Harold Johnson	Outdoor Recreation Planner
Les Allert	Outdoor Recreation Planner
Jeff Wilbanks	Outdoor Recreation Planner
Daryl Albinston	Chief, Resources Operations Staff
Sharon Paris	Natural Resource Specialist
Michael DeKeyrel	Realty Specialist
Paul McClain	Wildlife Biologist
Kenneth Shulte	Geologist
Don Sasseville	Chief Ranger
Anthony Lue	Sector Ranger

B. PARTIES CONSULTED

Federal and State Agencies Consulted

Ray Bransfield	U.S. Fish and Wildlife Service
Fred Worthley	Regional Manager
	California Department of Fish and Game
Frank Hoover	California Department of Fish and Game
Bob Vernoy	California Department of Fish and Game
Paul Hinman	Federal Aviation Administration
John Ogara	China Lake Naval Weapons Center
	Environmental Division
Ramesh Gpta	California Department of Transportation

Community Groups and Residents

El Mirage Improvement Association
El Mirage Fire Department
Hank Noble, Shadow Mountain Village
John Shaw, Shadow Mountain Village

Visitor Organizations

Representatives from the following organizations participated in the planning effort as members of the Workgroup:

California Off Road Vehicle Association
Lost Angeles Motorcycle Club
American Motorcyclist Association, District 37
California 4 Wheel Drive
Southern California Timing Association
United Gyrocopters Association
Jarick Corporation
United Mining Councils of America
American Landsailing Association
Sylmar Hang Gliding Association
Southern California Soaring Association
Port-A-Potti Pilots (radio controlled airplanes)
Film Permits Unlimited
Region 12 Soaring Council

RESOURCE DATA

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RESOURCE DATA

The resource data evaluates the resources and their uses within the Management Area and the zone of influence. The resources evaluated comprise the affected environment. The impacts to the affected environment have been analyzed in the environmental assessment.

I. Natural Resource Values

A. Climate

Weather recording stations at nearby Edwards and George Air Force Bases indicate the affected environment has a typical continental high desert climate with hot and dry summers, and cool and dry winters. On an average of 113 days per year the temperature is about 90 F. Freezing temperatures occur approximately 50 days per year, usually during winter night-time hours.

Prevailing winds are from the west-southwest at ten miles per hour; however, high surface winds (35 mph) with occasional gusts of more than 70 miles per hour are frequent.

In this region of the desert the evaporation rate is greater than the total amount of precipitation. The annual rainfall occurs in two distinct periods and averages between five and six inches a year. During November through April rains are usually a result of cold Pacific marine air intrusions. Three or four snow storms are common each winter. During July through October moisture is received from warm tropical continental air masses. The air masses often produce thunderstorms and may result in intense flash floods.

B. Topography

The topography of the affected environment is varied, ranging from a flat, dry lakebed to rugged hills. El Mirage Dry Lake is located in the southwest portion of the Management Area at an elevation of 2,830 feet above sea level. The highest point, at 3,996 feet, is an unnamed peak in the Shadow Mountains approximately four miles north-east of the dry lake. The Shadow Mountains are divided into two distinct ridgelines, the north and south, which are separated by a valley where Shadow Mountain Village is located. The north ridgeline is outside of the Management Area.

There is one major wash within the affected environment. It runs west to east and drains the Shadow Mountain Valley east into Fremont Wash and the Mojave River. No major washes exist within the Management Area. Small washes exist at higher elevations (in the Shadow Mountains) and fan out before they reach the lakebed.

C. Vegetation

No known state or federally-listed threatened, or endangered plant species are known to exist in the affected environment. No candidate species are known to be present. California listed sensitive plant species that have a low potential for being in the affected environment include Chorizanthe spinosa, Cymopterus deserticola, and Eriophyllum mohavense. The north-east corner of the zone of influence contains about 8,300 acres of the Western Mojave Desert Mojave Saltbush unusual plant assemblage.

Vegetation in the affected environment consists of three basic types: Creosotebush Scrub, Mojave Saltbush-Allscale Scrub, and Iodinebush-Alkali Scrub; each typical of the western Mojave Desert.

Creosotebush Scrub

Creosotebush Scrub represents approximately 80% of the vegetation in the affected environment. This vegetation type is found on a wide variety of soils ranging from finely divided, poorly drained, to coarser well drained associations. Creosote (Larrea tridentata) is the dominant species of this assemblage. Associated species include Burrobush (Ambrosia dumosa), Cheesebush (Hymenoclea salsola), Anderson Thornbush (Sycium andersonii), Beavertail, Cholla and Cotton top cactus (Opuntia basilaris, Opuntia echiniocarpa, and Echinocactus polycephalus), Joshua tree (Yucca brevifolia), and Nevada joint-tea (Ephedra nevadensis).

Mojave Saltbush - Allscale Scrub

This vegetation type is restricted to a small area on the west side of El Mirage Lake extending north and south along the west boundary of the Management Area (2% of the total). This assemblage is found in mildly alkaline soils. Mojave Saltbush (Atriplex spinifera) is the dominant species and is usually found in association with Allscale (Atriplex polycarpa), Winterfat (Ceratoides lanata), Horsebush (Tetradymia glabrata) and Joshua tree (Yucca brevifolia).

Iodinebush - Alkali Scrub

The Iodinebush-Alkali Scrub within the affected environment (18% of the total) is restricted to the shoreline of El Mirage Dry Lake where the soils are highly alkaline. The dominant species of this vegetation type is Iodinebush (Allenrofia occidentalis). Associated species include Mojave Seablite (Suaeda torreyana), Alkali Scaton (Sporobolus airoides), Utah Swampfire (Salicornia utahensis) and Atriplex spp.

D. Wildlife

Vegetation species diversity is low within the three vegetative

associations comprising the affected environment. This in turn produces animal populations that are not diverse with regards to the numbers of different species. Water is very scarce within the affected environment further limiting animal species and distribution.

Other factors affecting wildlife habitat quality within the affected environment include seasonal grazing by domestic sheep, localized mineral exploration and development, a prolonged area drought that has lasted for the preceding three years, and the introduction of several invasive plant species such as Russian thistle (Salsola iberica), filaree (Eridium cicutarium), and schismus (Schismus sp.).

In addition, numerous sections of private land within the boundaries of the Management Area have been subdivided. In the late 1960's roads were graded and water diversion structures constructed in these areas. There are over 65 miles of graded roads associated with this type of existing development within the Management Area. These disturbed areas provide excellent opportunities for OHV play and are intensively used as such.

Several of these factors have a negative affect on wildlife within the affected environment. Even so, there is still a variety of species present, some of which may be found in large numbers. Typical mammal species present within the affected environment include the black-tailed jackrabbit, coyote, kangaroo rat, the desert wood rat, and the Antelope Valley ground squirrel.

Common bird species that use the habitats adjacent to the dry lakebed include the mourning dove, common raven, roadrunner, cactus wren, red-tailed hawk, loggerhead shrike, horned owl, burrowing owl, black-throated sparrow, blue-gray gnatcatcher, yellow-rumped warbler, horned lark and LeConte's thrasher.

Reptiles commonly present in areas that contain these three vegetative associations include the desert tortoise, zebra-tailed lizard, Mojave rattlesnake, Mojave green rattlesnake, sidewinder rattlesnake, gopher snake, racer snake, and the horned lizard.

Two terrestrial vertebrate species are of special management concern in the affected environment. The Mohave ground squirrel is listed by the California Department of Fish and Game (CDFG) as threatened. The desert tortoise was "emergency listed" as endangered by the U.S. Fish and Wildlife Service in 1989 and is considered threatened by the CDFG.

The entire affected environment is within the range of the Mohave ground squirrel. The highest population densities occur farther to the north and west of the lakebed. Records indicate that in 1980 a Mojave ground squirrel was trapped in Sec. 8, T.7N., R.6W.,

north of the Management Area, and another one was trapped in Sec. 24, T.6N., R.6W., south of El Mirage Road and the Management Area.

The federally listed endangered desert tortoise (Xerobates agassizii) historically occurred throughout the Management Area. Based upon density estimates contained in Berry (1984; Plate 2-2; "Tortoise Densities in the California Desert Conservation Area"), tortoise densities ranged from 0 to 250 per square mile. The entire El Mirage Cooperative Management Area is within areas designated by BLM as Category III (interim) desert tortoise habitat. The intent of management in Category III habitat is to apply measures to mitigate for actions affecting the desert tortoise and its habitat, but not to manage for long-term viable populations.

There is one tortoise transect (transect No 253) located within the boundary of the Management Area. There are four other transects located in the immediate vicinity (See Table 1). These transects were last read in 1978 and were used in the development of maps and figures for Berry (1984). Utilizing this data, there was an estimated 2344 desert tortoise within the Management Area when the California Desert Conservation Area Plan was completed in 1980.

Table 1. El Mirage Desert Tortoise Data

TRANSECT NO.	DATE	SUMMARY
253	1977	No tortoise sign
254	1977	11 burrows, 8 scats, 1 animal, 1 shell
960	1978	No tortoise, no sign
963	1978	No tortoise, no sign
1087	1978	4 burrows, no scats, 1 shell, no animals

Taking the above population estimate, factoring in an estimated 70 percent reduction in tortoise numbers, and then subtracting unsuitable habitat i.e. lakebed, mountains, and areas heavily disturbed by man, it is estimated that today there are less than 100 tortoises within the Management Area.

E. Minerals

According to the CDCA Plan (1980) the affected environment contains a few mineral resources. The classification of land within the

affected environment as a possible source of minerals is based on preliminary evaluation of geologic mineral occurrence, and limited field verification. The potential for these resources is based on the economic feasibility of removal.

The lakebed and lands to the north and south contain sodium. An area of approximately 4,000 acres just east of the lakebed contains limestone. The lakebed, and land a few miles to the north, is also part of a large region that has the potential to contain oil and

gas. An area approximately three miles wide, extending a few miles north and south from Shadow Mountain Village, is considered to contain tungsten. There is a drainage northeast of the lakebed that has an identified potential to contain sand and gravel.

F. Cultural

Eight cultural resource locations are known within the Shadow Mountains and along the southern shore of the lakebed, including prehistoric trails, cairns, trail shrines, historic mining remains, historical homestead (circa 1912), flake scatters and several areas of campsites. In general, the area has not been inventoried for cultural remains. All sites located to date are the result of surveys conducted for mining and desert land entry investigations.

No contemporary use of the Shadow Mountains by the Native Americans is known to occur.

G. Visual

The El Mirage Valley is basically intact as a natural and scenic setting. The few visible developments north of the lakebed blend into the natural landscape. The rural and undeveloped nature of El Mirage provides a remote background for visitors to enjoy while recreating and camping.

The lakebed is a popular location for commercial filming, with unobstructed views to the east, north, and west. The view to the south is of alfalfa fields, power lines, roads, and homes. Ruts on the lakebed caused by vehicles driving on it when the surface was wet are a source of visual distraction. The film industry complains that the ruts appear in studio quality photos of products filmed for advertisement, and in movies where the automobile is not intended to exist.

H. Air Quality

The air at El Mirage is generally of good quality. The air is clear with visibility exceeding 25 miles most days of the year. Exceptions occur during strong westerly winds when dust is blowing, and occasionally when smog filters up from the Los Angeles Basin.

I. Noise

The ambient noise level is very low. There are no major ground based sources of noise within the affected environment. This is partly because the Management Area is located in a rural section of the county. The principal sources of noise are highway traffic and aircraft. Highway traffic is confined to El Mirage Road and impacts residents nearest the road.

Aircraft are the primary single source of noise. Throughout the week military aircraft (helicopters, airplanes, and jets) use the airspace over and around the lakebed for training. There is a major east-west commercial air corridor located a few miles south of the affected environment which adds to the aircraft noise. There are also several types of recreational aircraft that takeoff and land on the lakebed. These tend to sound very noisy because they have small engines running at high speed and usually fly at low elevations.

The noise level is not a noticeable factor near or within the Management Area. There are large regions within the affected environment that are very peaceful and tranquil. Often in such places, no ground based noise can be heard, even on the busiest holiday weekend. During the week the lakebed is usually quiet except for the sound of the wind blowing. Over the weekend the noise level rises to reflect the increased use. However, nearly all the ambient noise remains within the Management Area. An exception to this is major holidays when recreation use triples and on the dates when special events are held.

J. Hydrology

Ground water in El Mirage is generally of good quality for both agricultural and domestic use. There are several underground aquifers running through the area. These are located at different depths from the surface and contain water in varying degrees of quality. The Mojave Water Agency places the average pumping depth at 90 feet.

The affected environment is part of the Mojave River drainage which extends from the Antelope Valley 30 miles to the west, to Soda Dry Lake 100 miles to the northeast. This is the remains of an ancient drainage system from the last ice age, and water is likely to follow this path during a major storm.

Most of the affected environment is within a large surface drainage system with El Mirage Dry Lake representing the base level of this ancient drainage. The primary source of this drainage is the San Gabriel Mountains south of the lakebed, and to a lesser extent the Shadow Mountains north of the lakebed. The remaining portion of

the affected environment, east of the Shadow Mountains, drains east across Highway 395 into Fremont Wash.

Winter and spring rains commonly result in standing water on the lakebed. During short intense cloud bursts, water that collects on the lakebed originates from within five miles of the lakebed. When it rains for long periods of time the ground becomes saturated and the runoff increases. Some of the runoff originates 10 to 20 miles away. There are several major washes that drain north from the San Gabriel Mountains to the lakebed. It is possible that during a major rainstorm the lakebed could overflow and drain to the east into Fremont Wash, and eventually the Mojave River. According to topographic maps the water would have to be 30 feet deep on the lakebed for this to happen.

K. Geology

The affected environment is mostly Quaternary-age alluvium with hills and mountains comprised of Paleozoic-age metamorphic rocks intruded by Mesozoic or older granitic rocks. Alluvial deposits in the area are divided into the following units: conglomerate (boulders and cobbles), older alluvium (gravel and sand of dissected valley fill), and valley sediments (wind-blown sand, playa clay, gravel, sand and silt) derived from the surrounding hills and the San Gabriel Mountains.

Lakebed

The lakebed, also called a playa, is underlain by Quaternary alluvial lake deposits estimated to be over 100 feet deep. Total acreage of the playa is 3,330 acres. The playa extends five miles from east to west, with a maximum width of one and a half miles. The playa is nearly flat, and has less than a one percent slope, with the west end being the lowest. The lakebed is composed of a fine, tightly packed silty clayloam. The fine materials are cemented together with mineral salts, forming an impervious clay.

According to BLM records¹, there has historically been a negligible amount of erosion on the lakebed. There has only been a small amount of erosion (wind or water) because the lakebed is tightly compacted and located at the bottom of a drainage. Over the last thirty years the intensive vehicle use on the lakebed has slowly broken down the top layer of the surface leaving it less compacted. As a result there has been an increase in soil loss through wind erosion. There has also been a slight increase in the formation of gullies as water erodes the softer surface while traveling to the lowest point on the lakebed.

¹Environmental Assessment Record for Commercial Filming - El Mirage Dry Lake 1980.

Ongoing changes that are occurring to the lakebed include the invasion of vegetation and mounds, and the formation of ruts. Weed seeds locate in cracks in the lakebed, then sprout and grow. The new plant then provides a small windbreak leading to the buildup of dirt around the plant. After a few years this forms a mound with plants growing in it. After a rain, the soil becomes extremely slick and clay-like, with a tendency to form mounds and ruts when altered by vehicle use. When the soil dries, these mounds and ruts harden and remain for years.

Soils

The soils in the affected environment are represented by seven different associations, as shown on Figure 1. The Rockland association actually develops very little soil and is composed primarily of exposed rock. This and the Playa association are best suited for recreation and wildlife uses. The remaining five associations are suited for a wide variety of uses including recreation, wildlife, urban development, limited agriculture and limited grazing. The limitations on agriculture and grazing are tied mostly to water availability. The Hesperia association would be considered the best for agriculture.

<u>SOIL ASSOCIATION</u>	<u>PERCENT OCCURRENCE</u>	<u>DEPTH (INCHES)</u>	<u>EROSION HAZARD</u>	<u>INHERENT FERTILITY</u>
Cajon	05	60+	Moderate	Low to high
Hesperia	10	60+	Slight to moderate	Moderate to high
Mohave-Adelanto Variance	12	24-48	Slight to Moderate	Low
Mohave-Sunrise Variance	48	20-40	Slight to Moderate	Low
Calvista-Hi Vista	03	-	Moderate	Low
Playas	05	-	-	-
Rockland	17	-	-	-

Figure 1

II. Resource Uses

A. Recreation

Visitor Use Statistics

During peak use periods (such as Memorial Day), up to 3,000 primary vehicles have been observed in the affected environment. (A primary vehicle is a street-legal vehicle which transports visitors between their home and their destination.) Each primary vehicle contains an average of 3.5 visitors. For those visitors participating in OHV activities, more than one OHV is normally associated with each primary vehicle. See Figure 2 for percentage of use by month.

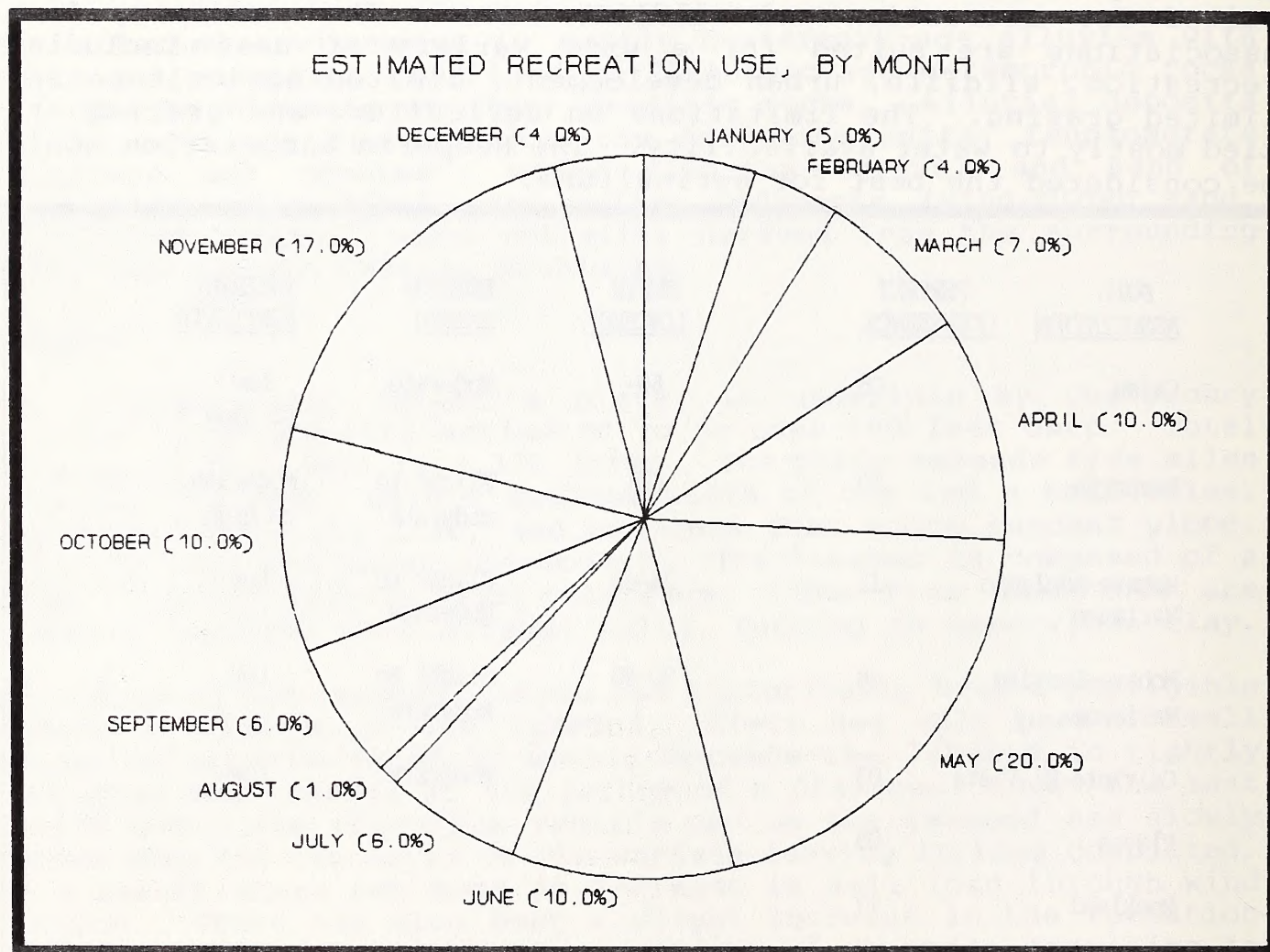


Figure 2

During the high use seasons, spring and fall, approximately 300 primary vehicles visit the area on each weekend day. Recreational use activity is usually higher on Sundays than on Saturdays. See Figure 3 for the percentage of use by days of the week.

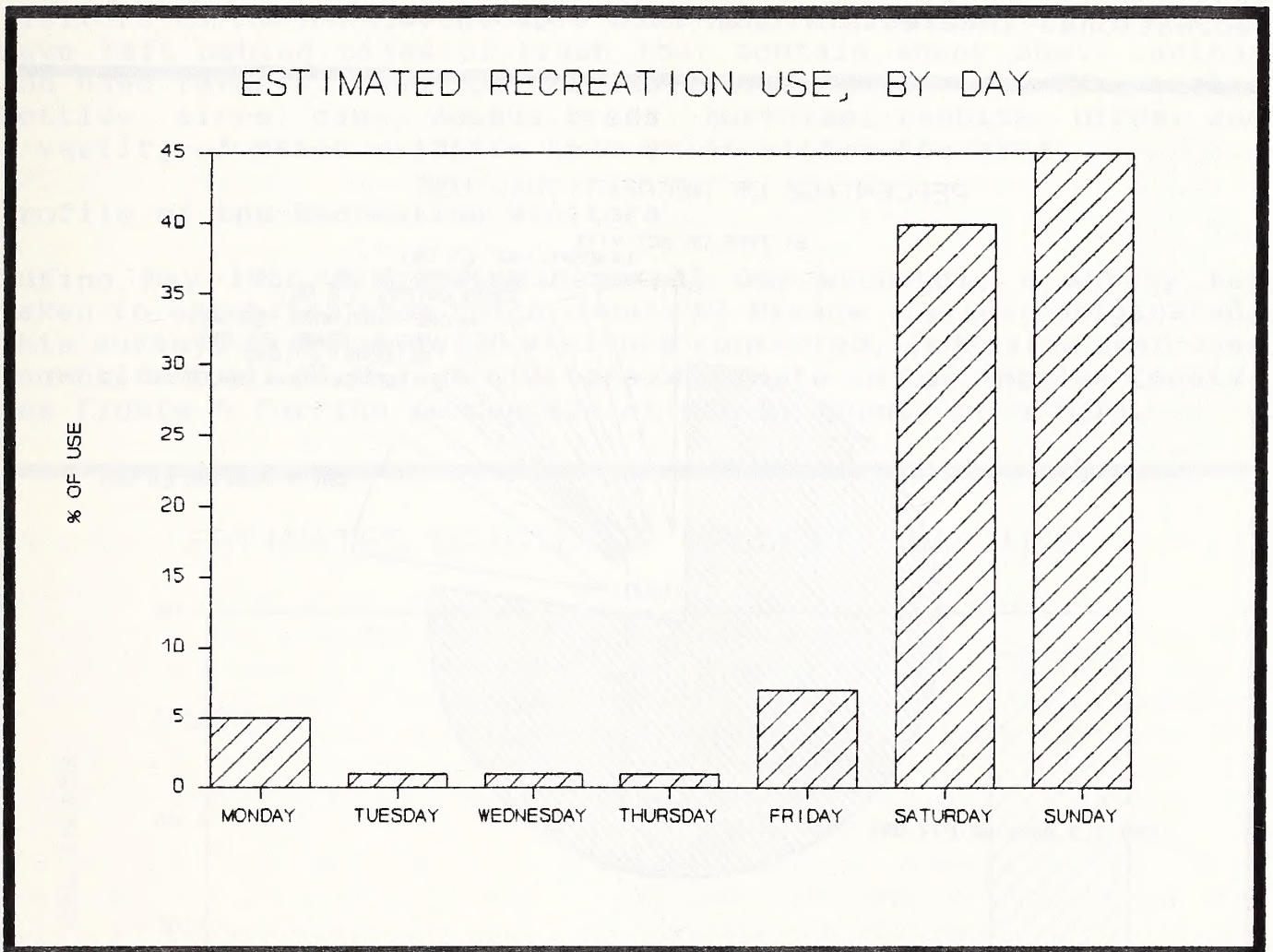


Figure 3

Friday nights during the Spring and Fall usually experience heavy use, particularly during a full moon. This use is attributed to visitors coming out on Friday nights to socialize. These visitors often leave early Saturday. The increase in visitation on Mondays and Fridays over the remaining weekdays is attributed to three-day weekends and overnight campers which arrive before the weekend.

Recreation Activities

Many types of recreational activities occur in the affected environment. See Figure 4 for the percentage of use by type of activity. Activities vary from formal and highly organized vehicle speed timing events to loosely structured activities involving

family groups. The Management Area is a popular day use area for large numbers of people from the Los Angeles metropolitan area. It is common for recreational visitors to participate in more than one activity while visiting the area. When large groups with self-contained camping units set up their campsites, the diversity of recreational interests within such a group is phenomenal. Some

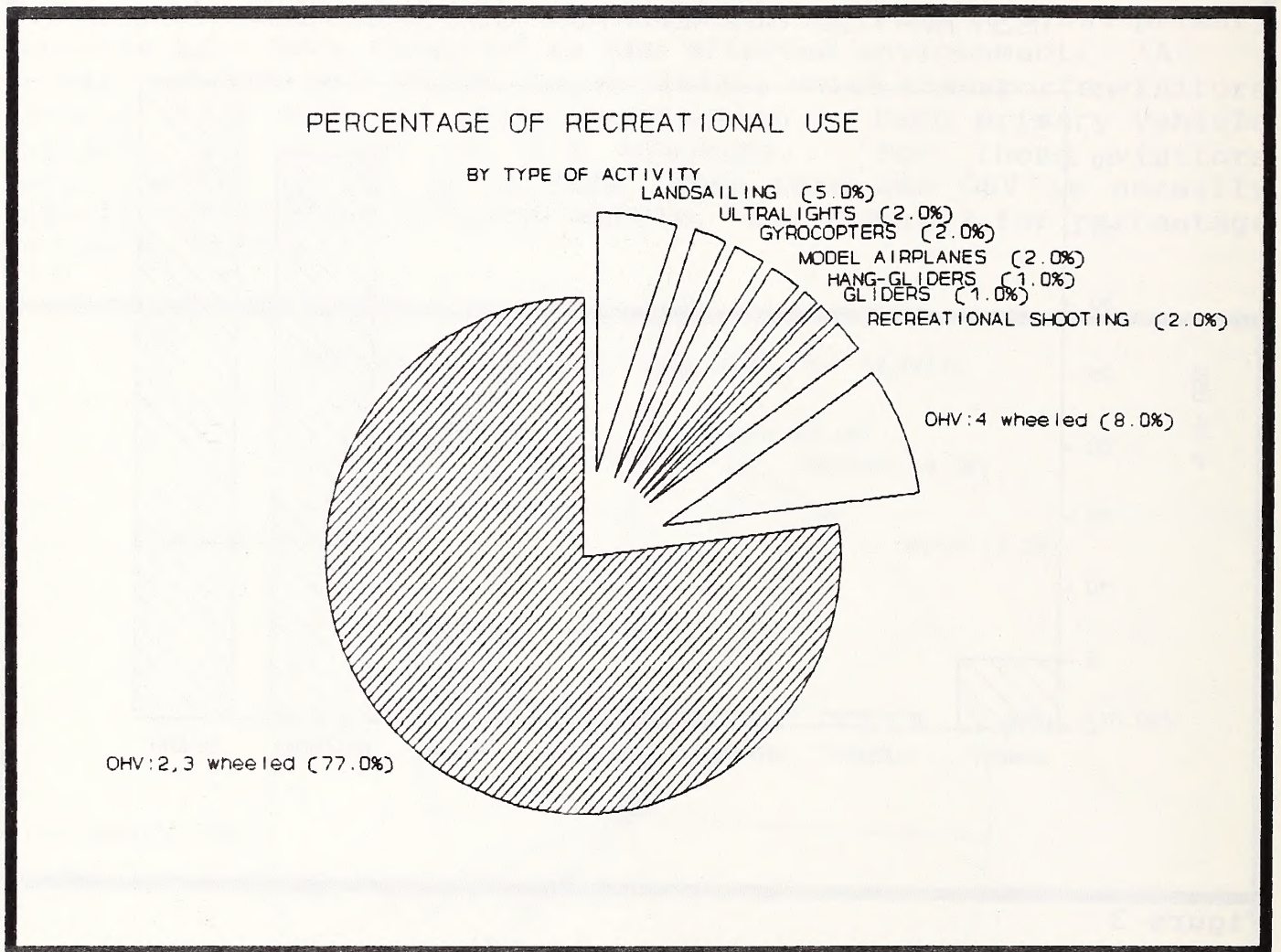


Figure 4

group campsites will have motorcycles, all-terrain vehicles, baja bugs and landyachts. Other group campsites may contain ultralights, gyrocopters and assorted OHVs. Individuals learning to fly gyrocopters, gliders, and hang-gliders can be seen being pulled though the air by a cable attached to a tow vehicle.

Other activities observed occurring within the Management Area include kite flying, mountain bike riding, the use of model rockets, hunting, and shooting. Contacts by field personnel with visitors who have claimed to be hunting rabbits has revealed a combination of dangerous and illegal activities that include:

hunting without a license, using a rifle, using spotlights at night, hunting from a vehicle, and the use of alcoholic beverages while hunting. Field evidence indicates that the majority of rabbits shot are not taken home, but are left to decompose.

Visitors to the Management Area who engage in recreational shooting have left behind piles of trash that contain spent shell casings and used targets. Shot up targets include signs, old TVs, broken bottles, tires, cans, Joshua trees, tortoise, rabbits, birds, and a variety of other wildlife that exist within the area.

Profile of the Recreation Visitors

During May 1986 (including Memorial Day weekend), a survey was taken to establish from which county El Mirage visitors originated. This survey, based on 1,430 visitors contacted, indicates that over one-half of all El Mirage visitors originate in Los Angeles County. See Figure 5 for the percentage of use by county of origin.

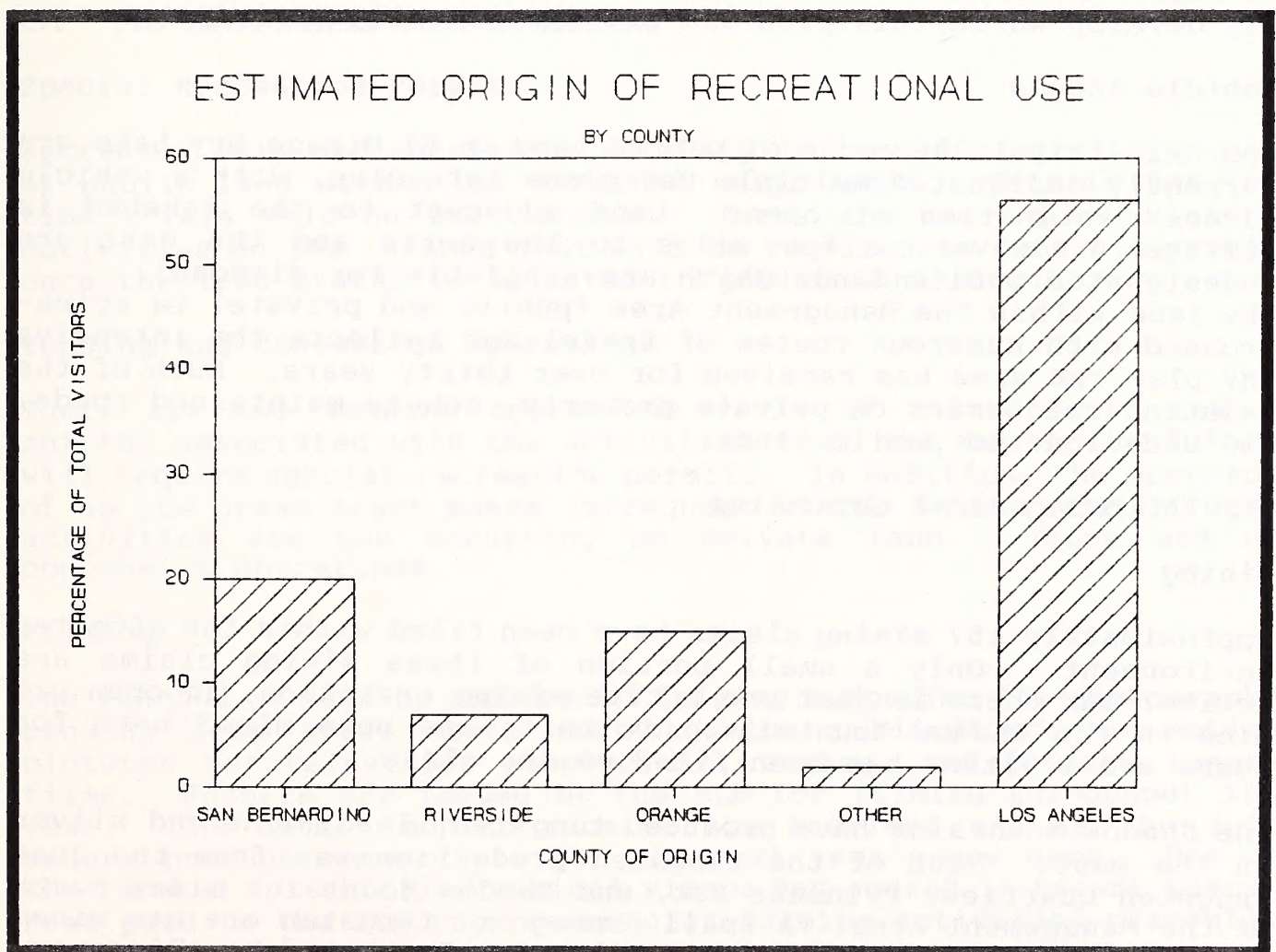


Figure 5

Projected Recreation, 1989 -1998

The Management Area provides recreational opportunities for a wide spectrum of activities and it is close to major population centers (the greater Los Angeles and San Bernardino Basins). Therefore, it is anticipated that use will continue to grow as these population centers continue to grow, relatively independent of other factors. It is likely that as the land surrounding the Management Area develops, day use will continue to increase for both OHV and other uses. The Management Area is also growing as a social setting where young people assemble on the weekends to cruise in cars, play games, picnic, and just "be seen".

Existing uses will continue and most likely expand in scope. The dominate use in the Management Area will remain OHVs. Some uses that will likely increase are model airplanes and rockets, kite flying, landsailors, parasailing, and ultralights. Located in Southern California, the Management Area is subject to the pressure of fads. There is no method to predict fads, so recreational uses may develop which this plan did not specifically anticipate.

Vehicle Access

Approximately 1,280 acres of public land on El Mirage Dry Lake are currently designated multiple use class intensive, with a vehicle access designation of open. Land adjacent to the lakebed is private. However, a few miles to the north and the east are undesignated public lands which are available for disposal. The land within the Management Area (public and private) is criss-crossed with numerous routes of travel and reflects the intensive OHV play the area has received for over thirty years. Much of the existing use occurs on private property, county maintained roads, and undesignated public lands.

B. Mining and Grazing

Mining

Approximately 157 mining claims have been filed within the affected environment. Only a small portion of these mining claims are active, and there is just one active mining operation, an open pit mine in the Shadow Mountains. Dolomite has been mined here for years and a patent has been filed on the claim.

The Shadow Mountains have produced tungsten, lead, zinc and silver in the past. Most of the tungsten production was from the Just Tungsten quarries, Princess Pat, and Shadow Mountains mines north of the Management Area. A small tonnage of tungsten ore was mined from 1942 to 1955 from the Beacon, Bonanza Dome, and New Discovery claims in Sec. 32, T.7N., R.6W. of the southern Shadow Mountains. Scheelite and tungsten ore have been prospected by open pits since

1943 at the Tungsten Queen, Tungsten King, and Maybell claims in Sec. 28 and 33, T.7N., R.6W., also in the southern Shadow Mountains. Between the late 1920s and 1951, a small tonnage of lead, zinc, and silver was shipped from the Red Raven mine in Sec. 31, T.7N., R.5W., half a mile west of Highway 395. The lakebed contains a large body of clay suitable for pond sealant.

Sheep Grazing

A portion of the Shadow Mountains Grazing Allotment, #8011, is within the Management Area. The allotment contains 36,583 acres of public land. Approximately 20,400 acres of the Management Area are included in the allotment. Of this, approximately 10,600 acres are existing public land, the remainder is private land that is identified for acquisition. The allotment has been classified as ephemeral range. During the spring, when forage is available (usually March through June), sheep can graze the allotment. The maximum number of sheep currently authorized for the allotment is approximately 1,275 for one month or 340 sheep for three months.

C. Authorized Activities

Special Recreation Permits

Currently only one recreation activity is issued a permit for use of public land within the affected environment. This is for the time trials held on the lakebed. There are two other existing activities on the lakebed that will be required to obtain a permit once the land status is adjusted to public ownership.

Vending and Concession Operations

There are two vending operations (sale of refreshments and T shirts) associated with the activities that now and in the future will require special recreation permits. In addition, the operator of an ice cream truck makes infrequent visits to the area. These activities are now occurring on private land. There are no concession operations.

Filming

The lakebed is used by commercial filming companies for photography ranging from still shots for magazine publications to motion pictures for television commercials, movies, and feature length films. Permits are issued by the BLM for filming throughout the year. The summer months receive the heaviest use as the auto makers produce commercials for the next year's new cars. Use of the lakebed for shooting musical videos has soared in recent years. Fees paid to the BLM from commercial filming activities presently average about \$10,000 per year.

Research and Development

Several firms currently use the lakebed and the land around it for testing and developing a wide range of products. Permits are generally issued for anywhere from a single day to two years. Firms engaged in research and development prefer to maintain a low profile to avoid attention, and therefore, often they cannot be distinguished from the recreational users. Firms issued permits in 1988 include two major OHV manufactures, a company working on a remote control spy plane, and a firm testing sails.

Educational Uses

Educational use of the Management Area primarily consists of students completing film projects. In addition, a graduate student from a mid-west college completed his dissertation on the geology of the Shadow Mountains. Such activities are authorized under the BLM permitting process.

Military Uses

The military bases in the high desert occasionally perform exercises that include the use of the Management Area. These exercises typically involve a few vehicles, an airplane, and approximately a half dozen paratroopers. In addition, every other year the lakebed is included in Operation Gallant Eagle, a major training exercise involving all branches of the military. During this exercise up to one hundred paratroopers are dropped over the lakebed. The soldiers are then picked up by personnel carriers. These activities are authorized under the BLM's permitting process.

Rights-of-way

Energy Production and Utility Corridor "P" (two miles wide) runs along HWY 395 through the eastern part of the Management Area. Originally established as a contingency corridor in the CDCA Plan, it was activated to full corridor status by the environmental impact statement and record of decision for the Meade-Adelanto 500 KV transmission line.

A small tract Lease (RO - 7697) exists on the S1/2 SW1/4 SW1/4 NW1/4 of sec. 12, T.6N., R.7W. The lease was issued on June 2, 1966. The lease expired on November 8, 1976, with a notation in the records that a trespass case be established.

III. Social and Economic Environment

A. Land Tenure

The Management Area will contain approximately 24,000 acres of public land upon completion of the acquisition program (Figure 1). Currently a little over half the land within the Management Area is in federal ownership. There are approximately 634 parcels of private land to be acquired within the Management Area. The central inholding contains approximately 671 additional parcels of private land. The parcels range in size from small 2.5 acre plots, to large plots with 320 acres.

	<u>Acres</u>	<u>Percent</u>
Zone of Influence	57,034	100.00
Public Land	17,597	30.85
Private Land	39,437	69.15
Management Area	24,405	100.00
Public Land	12,558	51.46
Private Land	11,847	48.54
Private Inholding Area	3,025	-
Management Area (w/o central inholding)	21,363	100.00
Public Land	12,558	59.16
Private Land	8,805	40.84

Figure 1

There are four occupied parcels within the boundaries. Two of these are located within the private inholding. With one exception there are no county maintained roads, or services (power, water, phone) within the Management Area.

B. Local Communities

El Mirage

The community of El Mirage forms the southern boundary of the Management Area. El Mirage has a population of approximately 165 families. The area experienced slow growth through the mid 1980's, however, since then development has increased at a more rapid pace. Most of the land is zoned D.L. (desert living) and there is an increasing amount of single family homes in the community.

Two restaurants serve the local community. Other businesses in El Mirage include Aerochem (industrial plant), a private airport (closed to public use), a real estate office, an insurance company, a landscaping business, two dairy farms, a feed store, a christmas tree farm, an airplane salvage yard, and approximately 1,000 acres

of alfalfa farming. There are a few additional small businesses operating out of private residences, and new businesses are forming at the rate of approximately three a year.

Shadow Mountain Village

Shadow Mountain Village is approximately one and one half miles north of the Management Area, snuggled in a quiet valley between the Shadow Mountains. The community is bisected by Shadow Mountain Road, which is not paved between HWY 395 and the Los Angeles/San Bernardino County line. The Village has a population of approximately ten families. The area is serviced with electricity, but no telephone service, to date. A few of the residents have recently sunk wells and reached potable water. There are no business establishments in the village.

C. Emergency Services

Medical Services

Currently, emergency medical service is being provided within the affected environment through an interagency dispatch agreement among the BLM, California Department of Forestry (CDF), California Highway Patrol (CHP), San Bernardino County Sheriff, El Mirage Volunteer Fire Department (E.M.V.F.D.), and Victor Valley Ambulance. Under this agreement the nearest available unit from each of these agencies will respond to a serious medical emergency within the Management Area or the zone of influence.

The community of El Mirage provides emergency medical service through a volunteer fire department equipped with one engine, two EMT-1s, and several firefighters trained as first responders. A rescue unit from the California Department of Forestry in Phelan, 15 miles south of the zone of influence, is also available to respond to emergency medical situations.

The nearest available ambulance service with an assigned paramedic is located in Victorville, 25 miles away. No medical or ambulance service is available from the City of Adelanto or nearby George Air Force Base. Hospitals are located in Victorville and Palmdale. Major trauma victims are usually transported by helicopter to either Loma Linda or San Bernardino County Hospital.

Firefighting Services.

Fire protection is provided by the El Mirage Volunteer Fire Department (paid call) and the California Department of Forestry (CDF). BLM has contracted with CDF for fire protection on public lands within the affected environment. Adelanto, George AFB, and other fire agencies are available to respond to fire emergencies through mutual aid agreements.

The El Mirage Volunteers have an engine stationed in El Mirage and are completing plans for constructing a fire station at the intersection of El Mirage and Airport roads. The CDF station nearest the lakebed is located 15 miles to the south in Phelan. It contains two engines and a rescue squad. There is a county fire station with two engines and a rescue squad ten miles east of the Management Area at Silver Lakes. The City of Adelanto, eight miles east of the access road, has a permanent full-time fire department with two engines, a water tanker, and a rescue squad.

A BLM Fire Center is located in Apple Valley, 30 miles to the southeast, and is available to assist CDF when requested. During the fire season (April through November), a helicopter is stationed at the BLM Fire Center, as are two Type 3 fire engines and a water tanker. There is a small air tanker (on contract) located at the Apple Valley Airport that is set up for making water/retardant airdrops. Full size aerial tankers are stationed at Foxfield in Lancaster, about 10 minutes flight time to the west and at Hemet, about 20 minutes flight time to the south.

General Information

General Information

A system will be reviewed by the system manager and the system manager will be responsible for the system.

Persons who are responsible for the system will be responsible for the system. The system manager will be responsible for the system.

The system will be reviewed by the system manager and the system manager will be responsible for the system.

General Information

APPENDIX B

PERMIT GUIDELINES & PROCEDURES

General Information

General Information

General Information

General Information

General Information



APPENDIX B

PERMIT GUIDELINES & PROCEDURES

Permit Guidelines and Procedures

General Procedures

A system will be developed to track uses and events within the management area. This will include publishing event dates in the semi-monthly newsletter.

Permits issued for recreation and commercial uses entitle the holder of the permit to limit public access where necessary to facilitate the needs of the permitted activity. It is the responsibility of the permitted party to secure any areas where public access is limited.

The lake bed will be delineated into six permit sections for the purpose of issuing permits (Illustration 7). The permit section corners will be identified by sunken markers at ground level. The mud play area east of the lake bed is available for use by permit, however it is not considered as one of the permit sections of the lake bed.

The speed limit in the mud play area is 15 MPH, except for use associated with a permit. The mud play area is available for use at anytime, and may be filled with water from an outside source for use in association with a permit.

Persons, businesses, or organizations engaging in a permitted activity must have the proper permits. All permitted activities must comply with the rules and regulations of the Bureau, and other agencies with the appropriate jurisdiction. Bonding may be required to ensure the BLM has the recourse to repair environmental damage resulting from actions in non-compliance.

When a portion of the lake bed is wet, permits will be restricted or cancelled as conditions require. Fees paid in advance will either be refunded or applied to a permit for a different date.

Special Recreation Permits (SRPs)

SRPs will be issued for competitive and non-competitive recreation events throughout the management area in compliance with 43 CFR, subpart 8372. Applications must be received 120 days in advance of the event and contain, among other items, proof of liability insurance.

Permitted events that involve vehicles travelling at potentially high rates of speed will either be limited to the lake bed or not allowed. Permit applications for educational uses must be accompanied by a letter of intent from the educational institution; fees may be waived.

SRPs will not be issued on National Holidays with the following exceptions:

- (a) Martin Luther King Weekend
- (b) President's Day Weekend
- (c) Fourth of July
- (d) Labor Day Weekend

There is no limit to the number of SRPs that may be issued for the use of one permit section of the lake bed. A maximum of only four of the six permit sections of the lake bed will be available for exclusive use by permit on a holiday or weekend day; all six sections are available Monday through Friday. A maximum of only 16 SRPs will be issued per year that require the use of more than one permit section of the lake bed.

The dates for permits may be reserved in advance through the existing BLM Desert District office lottery system. Based on historical use the following organizations will have the privilege of selecting the dates for their permits in the following order:

- (a) Six dates are reserved for the Southern California Timing Association.
- (b) One date is reserved for the United Gyrocopters Association.
- (c) Two dates are reserved for the American Landsailing Federation.

Seven permit dates for use requiring more than one permit section of the lake bed will thus be available in the lottery system. The lottery system will be evaluated on a yearly basis to assure that it is meeting the needs of the visitors and the user organizations.

Land Use Permits (LUPs)

LUPs will be issued in accordance with 43 CFR subpart 2920.1. Permits may be issued for commercial and non-profit use throughout the management area, provided the permitted activities are compatible with recreational uses.

Within the management area LUPs will be issued by legal definition, with the exception of the lake bed where they may be issued by the six permit sections. A maximum of 6 LUPs may be issued for the lake bed on one particular day.

Weekend permits may be issued for commercial activities that require less than one acre on the lake bed, or less than 5 acres throughout the rest of the management area.

Vending

Land use permits will be issued, according to 43 CFR subpart 2920.1, to authorize the sale of foods, goods, and services by vendors within the management area using the following criteria:

Vending operations are to be operated within a 1/2 mile radius of an existing restroom facility (Illustration 8); except where a vending operation is associated with a permitted activity. Prior to construction of the restroom facilities vendors may locate at a site with the approval of the project manager.

Vendors must comply with the standard permit stipulations, plus any specific stipulations. Permits are non-transferable.

APPENDIX C

SUPPLEMENTAL RULES

- _____

SUPPLEMENTAL RULES

- _____

APPENDIX C
SUPPLEMENTAL RULES

SUPPLEMENTAL RULES

The following supplemental rules will be implemented to protect the health and safety of the visitors and the natural environment. Information relative to these rules will be available in the management area brochures. Signs will be posted prior to enforcement. These rules will be re-evaluated on a regular basis to determine appropriateness. Changes will be made accordingly.

1. Any activity that interferes with the operations of an authorized activity by blocking access, operating in a restricted area, creating undue noise, causing dust to blow, or obstructing the view, shall be prohibited.
2. The discharge of rifles, pistols, and shotguns, or any other firearms, shall be prohibited within the management area.
3. The landing or taking off of aircraft shall be prohibited on the lakebed from 1/2 hour after sunset, to 1/2 hour before sunrise.
4. It shall be prohibited to camp within one hundred feet of the perimeter barrier, except in sections 13 and 14 of T.7N, R.6W., where camping is prohibited within 500 feet of the perimeter barrier.
5. It shall be prohibited to camp in, on, or within any of the facilities. It shall also be prohibited to camp within the perimeter fence at the headquarters complex.
6. On the lakebed it shall be prohibited to camp further than one hundred feet from the natural shore (including jetties, mounds, and islands), except as authorized by permit.
7. Camping shall be prohibited in sections 13 and 14 of T.7N., R.6W., except with a permit.
8. It shall be prohibited to park a vehicle, or to have a campfire, within 15 feet of a Joshua Tree.
9. It shall be prohibited to violate the stipulations of a permit, either a special recreation permit, or a land use permit.
10. It shall be prohibited to violate a temporary closure within the management area. Temporary closures may include, but are not necessarily limited to, the lakebed during windstorms and routes of travel during conservation repairs.
11. It shall be prohibited to disobey any sign.

The following supplemental rules shall be implemented to protect the health and safety of the visitors and the national environment. Information relative to these rules will be available in the management area brochures. These rules will be enforced as a regular basis. These rules will be enforced as a regular basis. Changes will be made accordingly.

1. Any activity that interferes with the operations of an authorized activity by obstructing access, including in restricted areas, creating noise, or creating dust to the extent obstructing the view shall be prohibited.
2. The discharge of litter, refuse, and substances, or any other substance, shall be prohibited within the management area.
3. The landing or taking off of aircraft shall be prohibited in the island from 1/2 hour after sunset, to 1/2 hour before sunrise.
4. It shall be prohibited except within the boundaries of the perimeter barrier, except in sections 12 and 13 of T.T.W., where camping is prohibited within 200 feet of the perimeter barrier.
5. It shall be prohibited to camp in, on, or within any of the facilities. It shall also be prohibited to camp within the perimeter fence at the perimeter camp.
6. On the island it shall be prohibited to camp within the one hundred feet from the natural shore (including reefs, rocks, and islands), except as authorized by permit.
7. Camping shall be prohibited in sections 12 and 13 of T.T.W., except with a permit.
8. It shall be prohibited to park a vehicle, or to have a campfire, within 15 feet of a house tree.
9. It shall be prohibited to violate the stipulations in a permit, either a special restriction permit, or a land use permit.
10. It shall be prohibited to violate a temporary closure within the management area. Temporary closures may include, but are not necessarily limited to, the island during construction and routes of travel during construction.
11. It shall be prohibited to destroy any plant.

APPENDIX D

LAKEBED REPAIR STANDARDS

APPENDIX D

LAKEBED REPAIR STANDARDS

Lakebed Surface Repair Standards

1. Repair of holes in the lakebed surface.

- a. All fill material must be of the same composition as the lakebed surface.
- b. The fill material is to be broken up into a fine consistency with no clumps larger than 1" allowed.
- c. The area/hole to be repaired is to be moistened with water immediately prior to any fill material being added.
- d. Only six (6) inches of fill material at a time is to be added to a depression, and then enough water is to be added to moisten the fill material, but no more than can be absorbed in a few minutes. The repair of a deep hole is to be completed by adding another six inches of fill at a time, and then wetting each layer with water.
- e. The final 6 inches of fill material is not to be wet down until the repaired area is compacted. The vehicle used to compact the fill material must have a minimum gross weight of 2,000 pounds.
- f. Upon filling in the depression, the entire repaired area plus a minimum of an additional 12" around the perimeter of the depression, is to be wet down to the point where the water puddles and does not immediately soak in.
- g. The hole is to be filled so that after final compaction and wetting, the repair material will rise 1" above the surrounding lakebed surface for every 2' of depth of the original hole.
- h. The persons/company responsible for the repair are to provide all the equipment, materials, and water necessary for the repair.
- i. The Bureau of Land Management will provide a person to inspect the mitigation. The repair is not considered complete until a final inspection is made by Bureau personnel.

2. Repair of vehicle ruts while the lakebed surface is wet.

- a. Damage made to the lakebed surface while it is wet is best repaired while the lakebed is still wet. This is accomplished with hand tools similar to a bull float used

for finishing concrete. The BLM can provide the tools and will supervise their use.

- b. The Bureau of Land Management will provide a person to inspect the mitigation. The repair is not considered complete until a final inspection is made by Bureau personnel.

APPENDIX E

ROUTE DESIGNATION
DECISION RECORDS

about the subject and the fact that the subject is a member of the same organization as the person who was the subject of the previous report. The subject is a member of the same organization as the person who was the subject of the previous report. The subject is a member of the same organization as the person who was the subject of the previous report.

APPENDIX E

ROUTE DESIGNATION DECISION RECORDS

APPENDIX F

The official route designation decision forms reflecting the open and closed routes of travel will be included in the final plan.

The official route designation number for
reflecting the open and closed routes of
travel will be included in the first line

7-10-101 801-101
1797 101 882-101
25-101-101

ENVIRONMENTAL ASSESSMENT FOR THE EL MIRAGE COOPERATIVE MANAGEMENT AREA

MANAGEMENT PLAN
San Bernardino County
California

APPENDIX F

ENVIRONMENTAL ASSESSMENT

California Department of Parks and Recreation
Off-Highway Motor Vehicle Recreation Division
California Off-Highway Motor Vehicle Recreation
Commission
San Bernardino County Regional Parks Department
San Angeles County Department of Parks and Recreation

Prepared by:

Brad M. Miller
Outdoor Recreation Planner
Bureau of Land Management
California District Office
Bureau Resource Area

01-19-91
Date

ENVIRONMENTAL ASSESSMENT
APPENDIX F

8340 (El Mirage)
1791 (CA 068.52)
CA-068-0-7

ENVIRONMENTAL ASSESSMENT FOR THE EL MIRAGE COOPERATIVE MANAGEMENT AREA

MANAGEMENT PLAN
San Bernardino County
California

CA-068-0-7

Cooperating Parties:

U.S. Department of Interior,
Bureau of Land Management

California Department of Parks and Recreation,
Off-Highway Motor Vehicle Recreation Division

California Off-Highway Motor Vehicle Recreation
Commission

San Bernardino County Regional Parks Department

Los Angeles County Department of Parks and Recreation

Prepared by:

Brad Martin
Outdoor Recreation Planner
Bureau of Land Management
California Desert District
Barstow Resource Area

01-19-90
Date

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1500-100-000000

ENVIRONMENTAL ASSESSMENT FOR THE EL MIRAGE COOPERATIVE MANAGEMENT AREA

MANAGEMENT PLAN
San Bernardino County
California

1500-100-000000

Cooperating Parties:

U.S. Department of Interior,
Bureau of Land Management

California Department of Parks and Recreation,
Off-Highway Motor Vehicle Recreation Division

California Off-Highway Motor Vehicle Recreation
Commission

San Bernardino County Regional Parks Department

Los Angeles County Department of Parks and Recreation

Prepared by:

Paul M. [Signature]

Outdoor Recreation Division
Bureau of Land Management
California Desert District
Barstow, California

Environmental Assessment

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I. INTRODUCTION

A. Setting

The El Mirage Cooperative Management Area is located at the western edge of the Barstow Resource Area, approximately 20 miles northwest of Victorville. Upon full development the Management Area (Illustration 2 in the Management Plan) will encompass a total of approximately 24,400 acres of public land and will accommodate a variety of recreational and commercial uses. For planning purposes the affected environment is identified as the Management Area plus the surrounding area from one to five miles wide. This surrounding area is referred to as the zone of influence and will be indirectly impacted from the management actions within the Management Plan.

This environmental assessment (EA) is combined with the Management Plan. The Management Plan identifies the affected environment and specifies the philosophy and specific management actions for developing the Management Area. The EA analyzes the impacts of the Management Plan (proposed action) and alternatives, assesses the cumulative impacts, and identifies the irretrievable commitment of resources. The EA does not list specific mitigation items for the proposed action because the Management Plan contains the actions that appropriately mitigate the impacts to the affected environment.

B. Need for the Proposed Action

For over 35 years, public and private lands within the Management Area, and the zone of influence, have been used for off-highway vehicle (OHV) recreation. The public and private lands are intermixed and recreational visitors unintentionally trespass on the private land. The local communities have demanded action be taken to reduce recreation related impacts (trespass, trash, vandalism) on private land. In addition, the 1980 *California Desert Conservation Area (CDCA) Plan* identified the public land in the area as available for disposal. Combined, these actions will virtually eliminate recreation opportunities in the area.

To protect the public's recreation opportunities, the El Mirage Cooperative Management Area was established in 1988. It was established through an Interagency Agreement among the Counties of San Bernardino and Los Angeles, the State of California Department of Parks and Recreation, the California Off-Highway Motor Vehicle Recreation Commission, and the BLM. Each party will play a specific role in bringing the Management Area to fruition. As the lead agency BLM has prepared the long-term comprehensive Management Plan which will guide the development and management of the area.

C. Conformance With Land Use Plans

The *CDCA Plan* recognized the historic use, and the recreation opportunities that exist at El Mirage. At the time the *CDCA Plan* was prepared the land on and around the lakebed was a mixture of public and private. Public land on the lakebed (1,250 acres) was designated multiple use class (MUC) "intensive" ("I"), with a vehicle access designation of "open". Public land around the lakebed was left unclassified and identified for disposal. The mixed land ownership pattern created a situation where there was no apparent solution to assure the long-term viability of the public's recreation opportunities.

The *CDCA Plan* called for the BLM to continue to work with the California Department of Parks and Recreation to provide for a variety of motorized-vehicle use opportunities through the State Off-Highway Vehicle Grant Fund. The State of California, as a signatour to the Interagency Agreement is providing the majority of the funding for the Cooperative Management Area. The funding will be used for land acquisition, facilities, staff, materials and equipment. The acquisition of approximately 12,000 acres of private land will resolve the land ownership conflict associated with the current uses.

The *CDCA Plan* will be amended as a result of the Management Plan. The amendments will change the multiple use class and vehicle access designations which will allow for the retention of existing public land and acquisition of private land for intensive OHV recreation. It will also allow for the closure of certain public land within the zone of influence to reduce OHV related trespass. The plan amendments and management actions contained within the Management Plan (proposed action) are consistent with the San Bernardino County General Plan.

D. Public Scoping

In the fall of 1984 a Workgroup was formed to seek a long-term solution for the issues concerning El Mirage dry lakebed and the Shadow Mountains. The Workgroup was composed of residents from the nearby communities and representatives of the various recreational and commercial interests using the area. The Workgroup met on a regular basis throughout the second half of 1984 and for the first half of 1985. The focus of these initial meetings was to identify, analyze, and propose solutions for the issues concerning land use.

The Workgroup completed an exhaustive study of possible means to resolve the issues, and in 1985 published the *El Mirage/Shadow Mountains Feasibility Report*. The report made recommendations concerning a manager of the project, funding sources, development of a management plan, acquisition, facilities and services,

management and operations, and personnel. These recommendations have been incorporated in the Management Plan.

Following the feasibility report, the Workgroup remained active to provide input and to assist with preparation of the Management Plan. During preparation of the Management Plan two public meetings were held to obtain public comment concerning the issues. Additional public meetings will be held for public comment on the draft plan. The Workgroup will continue to be active throughout development of the final plan.

II. PROPOSED ACTION and ALTERNATIVES

A. Alternative A, Proposed Action

The Bureau of Land Management's proposed action is the implementation of the *El Mirage Management Plan*. The proposed action is a refinement of the recommendations contained in the 1986 publication *A Proposal to Establish the El Mirage Special Recreation Area*. The specific management actions to be implemented under the proposed action are detailed in Part III of the Management Plan. The implementation schedule and cost projections for the Management Plan are shown in Part IV.

In summary, the proposed action is the development of the El Mirage Cooperative Management Area. This would be accomplished by designating approximately 24,400 acres as an off-highway vehicle recreation area, with MUC "I" and vehicle access designation "open". This would include approximately 12,400 acres of existing public land, and approximately 12,000 acres of private lands identified for acquisition (Illustration 3 in the Management Plan). Proposed facilities that would be developed include five restrooms, an internally maintained road network (18 miles), an entrance station, a headquarters complex, and a perimeter fence.

Visitor services and resource protection would be accomplished with a total of six rangers (3 law enforcement, 3 EMT). Entrance fees would be collected at the primary entrance, and on holiday weekends at two secondary entrances. Visitor services would include first aid, law enforcement, signing, and visitor education. Resource protection would include: actions to mitigate impacts to desert tortoise and the Mohave ground squirrel, lakebed use restrictions (for dust control and surface protection), actions to manage vegetation (i.e. replace Joshua trees), the installation of vehicle barriers, and the protection of cultural sites.

Part III of the Management Plan contains actions to both manage the recreation use and to mitigate associated impacts to an acceptable level. The Management Plan also includes a series of

actions designed to monitor the impacts to the natural environment to ensure they are within acceptable limits. For these reasons, the EA does not contain a specific list of mitigating measures.

B. Alternative B, No Action

The no action alternative would result in the management of El Mirage dry lake according to the California Desert Conservation Area Plan. In this scenario the lakebed (multiple use class "intensive"; vehicle access designation "open") would be managed for intensive OHV recreation, while the surrounding public land ("unclassified") would continue to be available for disposal. All existing uses would be allowed and restricted to the lakebed. There are no provisions in the *CDCA Plan* to acquire private lands, to hire personnel, or to develop facilities for the area.

The *CDCA Plan* recognized the existing uses, but did not present solutions to the issues associated with these uses. Under the no action alternative, BLM would have to resolve the access issue (to the lakebed), and other issues associated with managing use and providing visitor services. Experience has proven that in the current situation the BLM does not have sufficient resources, or the jurisdiction, to manage all the existing uses at El Mirage and in the Shadow Mountains. The San Bernardino County Sheriff has also gone on record as stating that the county does not have the resources to control the trespass, illegal shooting, littering, and other problems associated with recreational use of the area.

In the long-term, the reasonable foreseeable scenario for the no action alternative would be an organized effort on the part of the nearby communities to shut the area down to OHV use. Trespass and the associated problems are such that the surrounding communities have demanded a change to the existing situation. The vehicle access designation would most likely be closed on all the public land around the lakebed to reduce OHV related problems. The lakebed itself is not large enough to provide opportunities for OHV play and would also have to be closed to such use.

Over 85% of the existing recreation use is associated with OHVs. If the area were closed to OHV use it would no longer qualify for funding through the Green Sticker Program. The BLM would not be able to resolve the issues concerning recreation use of the area without these funds. The continued availability of the lakebed for non-motorized use would most likely be in jeopardy. If this were the case, the public land on the lakebed would also be disposed.

C. Other Alternatives

Five other alternatives, relative to size and shape, were considered in the development of the boundary for the El Mirage Cooperative Management Area. These alternatives were considered

but dropped from further analysis for a variety of reasons. The following is a description of the five alternatives and the reasoning for dropping them from further analysis.

Alternative C

This alternative incorporated existing public land on the lakebed, and land to the north and south just past the edge of the lakebed (total area of approximately 3,700 acres).

1. This small of an area would not have been able to accommodate the existing uses, and therefore there was little public support.
2. There was no provision for public access.

Alternative D

This alternative included all the lakebed and the Shadow Mountains directly to the east (total area of approximately 8,100 acres).

1. This alternative was considered too small to accommodate the existing uses. Opportunities for mining and grazing would not exist, and OHVs would have been extremely limited and confined.
2. This alternative was also considered to provide an inadequate variety of terrain for OHVs.
3. This alternative contained a low percentage of public land in relation to private property.

Alternative E

This alternative included the lakebed, the Shadow Mountains east of the lakebed, and the public land further to the east (total area of approximately 12,000 acres).

1. While this area was considerably larger than the previous alternatives, the amount of land available for intensive OHV use was considered small.
2. The variety of terrain was limited.
3. There most likely would have been severe environmental impacts from heavy use in such a confined area.
4. Several existing uses would not have been included in this geographical configuration. This included mining and grazing.

Alternative F

This alternative included the lakebed, the Shadow Mountains to the east, public land over to Highway 395, and some of the Shadow Mountains to the north of the lakebed (total area of approximately 20,400 acres).

1. This alternative did not include adjacent public lands that were compatible with existing uses.
2. This alternative involved lands with a high ratio of private compared to public.
3. There were high development cost associated with the large amount of private land to be acquired.

Alternative G

This alternative included the lakebed, the Shadow Mountains east and north of the lakebed, public land over to Highway 395, and Nash Hill (total area of approximately 26,800 acres).

1. The ratio of private to public land was very high.
2. The development cost were also very high. Most of the high costs were associated with the large amount of private land to be acquired.
3. The size of the area would have made fencing a difficult task.
4. There were a high number of occupied structures within this boundary configuration.

In summary, these five alternatives were not considered any further because they did not pose realistic solutions to resolve conflicts to the satisfaction of both recreationists and the local communities.

III. AFFECTED ENVIRONMENT

The affected environment for the Management Area and the zone of influence is detailed in the Resource Data (Appendix A) of the Management Plan.

IV. ENVIRONMENTAL CONSEQUENCES

The following terms¹ are defined for the purpose of discussion within the Environmental Consequences section of this EA:

Negligible impact - the degree of anticipated environmental impact is considered less than minor.

Minor impact - comparatively unimportant; in terms of the area's vegetation or wildlife resources, a minor impact is one affecting a specific group of individuals of a population in a localized area for one generation or less; the integrity of the regional population is not likely to be affected.

Moderate impact - an effect sufficient enough to cause a change in the abundance, distribution, or quality of a resource. In terms of the area's vegetation and wildlife, the abundance or distribution of a portion of the regional or local population would change over more than one generation but would not affect the integrity of the regional population as a whole.

Major impact - an effect sufficient enough to cause a major change in the abundance, distribution, or quality of a resource. In terms of the area's vegetation and wildlife, the abundance or distribution of the regional or local population of a species would decline beyond which natural recruitment would not likely return that population to its former level within several generations.

Implementation of the El Mirage Management Plan will have a direct impact within the Management Area, and an indirect impact within the zone of influence.

A. Proposed Action Alternative

1. *Natural Resource Values*

Climate and Topography

There will be no impacts to the climate or the topography in the affected environment.

¹Environmental Assessment for the Imperial Sand Dunes Recreation Area Management Plan.

Vegetation

Overall, implementation of the proposed action will have a moderate negative impact on the plants in the affected environment. There are no known threatened or endangered plant species within the Management Area.

In the zone of influence, the closure of certain public lands to vehicle access (Illustration 4 in the Management Plan) and the restriction of vehicle use to designated routes of travel (Illustration 5 in the Management Plan) will have a moderate positive impact on the vegetation. The potential for plants in these areas to be damaged by a vehicle will be reduced.

Vehicle use will not be limited to existing routes of travel within the Management Area. Opportunities for OHV play will be unrestricted. This will have a moderate negative impact on the vegetation. Route proliferation will continue with the inadvertent loss of some plants. Studies of similar OHV recreation areas in the Mojave Desert¹ estimate that approximately 4% of the total vegetative cover will be destroyed. However, due to the close proximity of large population centers, easy access, and the popularity of the Management Area, it is anticipated that the impact will be more severe. Possibly as much as 10% of the total vegetative cover could be destroyed.

Based on field observations of existing use patterns, recreation use will primarily impact small shrubs and annual grasses. Joshua trees and creosote bushes will be only slightly impacted. Route proliferation will be most intense along the primary access roads and near the popular camping and parking areas.

Camping and parking for day use will destroy all types of vegetation. Visitors typically spend a large part of their time riding OHVs around their camp. This leads to the development of a small clearing (50'-60') around the camp. Several of these clearings already exist and occupy a total of approximately 80 acres. Continued use would prevent plants from re-invading these areas. Camping and parking clearings will develop in new areas as a result of improved access, and will lead to an additional 20 acres of vegetation being cleared.

The planting of vegetation in small protected islands in popular camping and staging areas will provide scenic relief, stabilize the soil, and reduce rainfall run-off.

¹Stow, D. 1988. Interpretation of Aerial Photographs to Measure Off-Road Vehicle Disturbances in the California Desert District. BLM Contract No. CA 950-CT8-23. CDD, Riverside, CA.

Authorized activities will have a negligible impact on the vegetation. Land Use Permits and authorizations for military or educational uses will only be given if the activities do not propose negative impacts. Special Recreation Use Permits may be issued for OHV events that have the potential for disturbing or destroying small amounts of vegetation. Mining is allowed and presents the potential for impacting the vegetation through digging and scrapping activities. Grazing is also allowed and may result in the temporary reduction of native plants, predominately annuals.

Development of the facilities will result in the loss of a few individual plants. Buildings will be constructed on existing clearings wherever possible, and only existing routes of travel will be improved or maintained. Drilling the fence post holes for the perimeter barrier will result in the loss of some plants.

Some vegetation will be intentionally removed from the lakebed. These will be plants that have invaded areas of the lakebed disturbed by vehicle use, and in pockets protected from the wind by a man-made windbreak. This action will have a negligible effect on the vegetation in the Management Area.

Wildlife

Implementation of the proposed action will have an overall minor negative impact on wildlife. The Management Area encompasses the home range of two species of special concern. First is the desert tortoise, which is emergency listed as an endangered species by the U.S. Fish and Wildlife Service (USFWS), and is listed as threatened by the California Department of Fish and Game (CDFG). Second is the Mohave ground squirrel, a State listed threatened species.

The actions in the Management Plan relative to the tortoise and the Mohave ground squirrel reflect a dialogue between the BLM, CDFG, and the USFWS for these species. BLM has conferred with CDFG regarding the squirrel and the tortoise, and initiated formal Section 7 Consultation with the USFWS relative to the desert tortoise. A no-jeopardy opinion is expected.

Under the proposed action, there would be a negligible impact to any potential population of the squirrel within the Management Area. The presence or absence of Mohave ground squirrels within the Management Area has not been documented. Inventories will be conducted, populations monitored, and protection measures taken if appropriate.

Historically the desert tortoise occurred throughout the Management Area. However, management for viable populations of desert tortoise and the management for recreation (including OHV play) are not compatible within the El Mirage Cooperative Management Area. Maintenance of desert tortoise within the Management Area is not

feasible. To this extent, actions number fourteen and fifteen in the Management Plan (Resource Protection and Management section) are designed to mitigate the impacts to desert tortoise within the Management Area and the immediate surrounding area.

Concentrating large volumes of OHV play within a restricted area would result in the continued loss of both habitat and individual animals. The current level of annual take of desert tortoise is estimated to be less than 10 animals. This take is the result of crushed burrows, raven predation, respiratory disease, shooting of individual animals, crushing by vehicles, and visitors taking them home. This level of take would continue until full implementation of the appropriate level of mitigation as determined through implementation of actions number 14 and 15 in the Management Plan.

Vehicle travel throughout the Management Area will have a minor negative impact on all other forms of wildlife. Nesting birds will be disturbed. Some small animals, such as rats, snakes, and lizards, will possibly be killed by direct impact from vehicles. A few burrowing animals will possibly be killed underground when their dens are crushed by vehicles. There will be the loss of some habitat due to camping and parking activities.

Development of the facilities will occupy potential wildlife habitat and will, therefore, have a minor negative impact. Commercial, recreational, or educational activities could possibly destroy vegetation or cause disturbances to resting, feeding, or breeding wildlife.

Acquisition of approximately 12,000 acres of private land, and the retention of approximately 12,400 acres of public land will have a moderate positive impact on wildlife. For the most part the native vegetation will remain intact within the Management Area. As the surrounding private lands are developed the Management Area will become an island of native habitat.

Two existing guzzlers will be re-conditioned, and four new ones will be constructed within the Management Area and the zone of influence. These will increase the water available for wildlife such as fox, coyote, chukker, owl, red tail hawk, and other small animals, allowing the area to support greater numbers of individuals.

Minerals

Implementing the Management Plan will have a minor positive impact on the availability of minerals within the Management Area. Over 12,000 acres of private land will be acquired into federal ownership, including the subsurface mineral rights whenever possible. Federal ownership of these lands will ensure that the minerals remain available for future exploration.

Cultural

The actions in the Management Plan will have a moderate positive impact on the cultural resources within the Management Area. In accordance with guidelines in the *CDCA Plan*, sites not eligible for the National Register, but of local importance, will be incorporated into a comprehensive interpretive program for the Management Area. The sites will be identified, researched, and where necessary stabilized or protected (barriers).

Visual

The proposed action will result in a negligible impact to the visual values of the area. The Management Area would provide approximately 24,400 acres of open space in a rapidly changing rural residential area. However, the entire Management Area will be available for intensive recreation including OHV play. This will lead to the formation of trail and road scars.

Air Quality

Air quality in the Antelope and Victor Valleys will experience a minor negative impact as a result of the proposed action. The amount of vehicle exhaust emissions released into the atmosphere from vehicle related recreation would be negligible, and possibly less than what would occur if the area were developed for other uses.

The anticipated impact will come from soil surface disturbances. Vehicle use within the Management Area disturbs the soil and provides a source of fine loose dirt and dust particles. These particles become suspended in the air during wind storms and leave the boundaries of the Management Area as fugitive dust, which is commonly referred to as particulate matter-10 (PM-10).

Noise

Noise from activities within the Management Area will be a minor negative impact. During the day small aircraft will take-off from the lakebed and fly outside the Management Area. This will disturb the peace and tranquility of the local communities.

Noise from ground based vehicles consist of a light hum on busy weekends, with no discernible single source. Authorized activities also generate noise. The sound of special effects explosions for commercial filming will possibly be heard a few times a year in the community of El Mirage. The running of loud engines from cars participating in time trials on the lakebed will also possibly be heard in El Mirage (six days per year).

Hydrology

The Management Area overall will have a moderate negative impact on water resources. There will be no impact on underground water supplies. The headquarters facility will draw water from existing wells, therefore placing no additional demands on underground aquifers. The Management Area will pose no threat of contamination for ground water supplies. All restrooms will be fully self-contained, and all trash generated at the headquarters will be hauled to the nearest county landfill.

Development of the Management Area has the potential to have a moderate negative impact on the ability of surrounding communities to store surface runoff. The lakebed would not be available for the storage of large volumes of surface runoff as a result of the proposed action. Storing water on the lakebed will preclude recreational use. Therefore, alternative means of surface water storage will have to be located.

EL Mirage dry lakebed is the final destination point for surface water runoff from the watershed extending south into the San Gabriel Mountains. Increased development between the lakebed and these mountains will result in increased runoff. As water is channeled it picks up speed and travels farther. As the watershed continues to be developed, more and more surface runoff will reach El Mirage Dry Lake. Water does not soak into the lakebed, and it can take several months for it to evaporate.

Geology

The extensive use of OHVs within the Management Area will result in an overall moderate negative impact on the soils. Vehicle use will not be restricted to existing roads or trails. Some soils will be compacted, others will be broken down.

The use of vehicles throughout the Management Area will result in the loss of some vegetation and leave the soil exposed to erosion. In addition, the soil on routes of travel will become compacted, increasing runoff and making it difficult for vegetation to grow. As vehicles ride up and down the hillsides there will be a similar effect with the added possibility that gullies will form. The net effect will be increased wind and water erosion on these soils. This includes approximately 15% of the land in the Management Area.

The proposed action will have a minor negative impact to the dry lakebed. The normal everyday vehicle traffic would continue to crush and pulverize the top surface of the lakebed. This will be compounded by such activities as circle racing, the time trials and commercial filming. These activities involve vehicles repeatedly traveling over the same path. The impact to the surface from the repetitive vehicle traffic is the breakdown of the clay from a hard

packed surface to a fine powder. Most of these activities affect the top layer to a depth of approximately one inch.

On the lakebed, this will lead to the loss of soil by sheet erosion from the wind, and by the formation of gullies from water erosion. These losses will be slightly offset by the deposition of new sediments. Rain runoff will act to re-cement the top layer of the lakebed together forming a hard packed surface.

An increase in erosion on the lands north of the lakebed will result in an increase in the deposition of soils on the lakebed. However, these new soils will consist mostly of decomposed granite and very little clay. Over time the new sediment will mix with the clay of the lakebed resulting in a surface that does not compact as hard as the existing surface.

Some of the management actions are intended to restore and maintain the lakebed to its historical size. These actions will have a moderate positive impact. Encroaching vegetation and dirt mounds will be removed and holes will be filled (with material from mounds on the lakebed).

Wilderness and Areas of Critical Environmental Concern

There are no wilderness study areas, or areas of critical environmental concern, within or adjacent to the affected environment.

2. Resource Uses

Recreation

Implementation of the El Mirage Management Plan would have a major positive impact on recreation. Retention of existing public land and the acquisition of private land into federal stewardship would guarantee the availability of public recreational opportunities. This is a benefit that would be enjoyed by hundreds of thousands of visitors. Furthermore, implementation of the Management Plan would result in visitor services (first-aid, maintained roads, restrooms) that are designed to enhance the visitors experience.

The amount of public land available and designated for OHV play as a result of full development of the Management Area would be significantly increased. However, all public land in the zone of influence (outside of the Management Area) would no longer be available for OHV play. Key routes of travel will be designated open on these lands (Illustrations 4, 5, and 6 in the Management Plan).

A few popular camping, parking, and OHV play areas will be closed to vehicle use within the zone of influence. This will benefit non-motorized recreation activities such as hiking, horseback riding, and wildlife observation. The displaced vehicle use will result in temporary moderate negative impacts. Current visitor patterns will be disrupted, and some of the displaced visitors will attempt to re-locate in areas that are not designated for such use.

The land within the Management Area will be closed to both shooting and hunting. This will have a negligible impact on these activities. The area is currently open to shotgun shooting only. There are thousands of acres of land outside the Management Area available for this activity. There is no known hunting activity within the Management Area other than the recreational shooting of rabbits. Eliminating the discharge of firearms would contribute toward creating a more peaceful environment appropriate for a recreational setting.

The consequences of confining OHV play to within the final boundaries of the Management Area, and the subsequent closures of historic camping and staging areas outside of the Management Area, are acceptable to both landowners and recreationists. The proposed action represents a compromise between these two groups that are often diametrically opposed to each other. Landowners wish to confine, restrict, or abolish OHV use. Off-highway vehicle users traditionally want to open, leave open, or acquire more lands for riding opportunities.

Mining and Grazing

Implementing the Management Plan will have a minor positive impact on mining operations. Over 12,000 acres of private land within the Management Area would be acquired into federal ownership and would become available for mining. Existing federal procedures will accommodate mineral exploration and mining operations. However, the lakebed itself will be withdrawn from mineral entry and will not be available for mining. All public land within the zone of influence will remain open for mineral exploration and mining.

There will be no impact on grazing in the affected environment.

Authorized Activities

Recreation, commercial, education, non-profit, and military activities will all recognize a minor benefit. It is anticipated that there will be an increase in use of the permit system. All existing activities will be allowed to continue.

There will be no impact to the existing right-of-way for the utility corridor running through the east portion of the Management Area, parallel to HWY 395.

3. Social and Economic Factors

Land Tenure

The net impact of consolidating the land in public ownership will have a major positive benefit. Development of the Management Area will reduce trespass; provide opportunities for recreation and tourism; retain large open space; and provide a setting for commercial activities, such as product testing and filming. Funding will be provided primarily by visitors through their participation in the California Green Sticker Program and from entrance and permit fees.

Landowners within the Management Area will be made aware of the plans to implement the proposed action. All land will be acquired at fair market value. This would have a major negative impact on the landowners who do not wish to sell (estimated to be approximately 10% of the affected landowners). This would be a major positive benefit to landowners who have been unable to sell their land in part because of the existing recreation related activities that occur.

Most of the land in the zone of influence will remain unclassified, and will be available for disposal. The impacts of this action were documented for the *CDCA Plan* (1980). The analysis is contained within the Final Environmental Impact Statement and Proposed Plan, Section V (Environmental Consequences), segment 17, Land Tenure Adjustment, page E-82.

Much of the land proposed for acquisition is within the fire tax assessment district for the community of El Mirage. Acquisition and conversion of these lands from private to public will have a moderate negative impact by removing these parcels from the tax base. This was recognized by the community of El Mirage early in the planning process. The major positive benefit of solving historic recreation related problems through the creation of the Management Area outweighs the potential loss in revenue.

Local Communities

The proposed action will have a moderate positive impact on the surrounding communities overall. The Management Area will attract thousands of visitors each year. Providing services for these visitors will result in increased business and sales revenue. An additional benefit will be the fencing of the Management Area and the subsequent control of OHV access through the local communities. The incidence of trespass and associated problems (noise, dust, trash) will be greatly reduced.

Development of the Management Area will have a minor positive impact on the two existing restaurants within the community of El Mirage. As the only eating establishments in El Mirage they should continue to receive the visitor's business. Furthermore, permanent concession operations will not be permitted within the Management Area for similar services that are available in the adjacent communities. There would possibly be an initial minor negative impact due to a disruption of the current visitor use patterns. Erecting the boundary barrier will necessitate a change in existing visitor patterns from accessing the restaurants on OHVs to accessing these restaurants only on street legal vehicles. It is anticipated that any initial impact will be offset by an increase in total visitor use.

Fencing the perimeter of the Management Area and controlling OHV play outside of the boundaries will greatly enhance the property values in the surrounding area. This action will reestablish the quiet rural atmosphere that is preferred by the local communities.

The benefit of restricting OHV play outside of the Management Area will be offset to some degree by the loss of freedom for the local residents. They would no longer be able to access the Management Area by riding their OHVs directly from their residences. They will have to transport all non-street legal vehicles into the Management Area via established entry points. The issue of OHV trespass within the local communities may surface again if many of the violators are themselves from the local communities.

Emergency Services

There will be a moderate positive impact on the emergency services within the affected environment with the proposed action. The BLM law enforcement rangers will supplement the efforts of the County Sheriff and the California Highway Patrol to control recreation use within the zone of influence; this includes trespass, littering, and illegal shooting. The local communities will also benefit from the availability of the Management Area personnel for responding to medical and fire emergencies.

B. Alternative B, No Action

1. Natural Resource Values

Climate and Topography

There will be no impacts to the climate or the topography in the affected environment.

Vegetation

In the short-term, there will be a major negative impact to the vegetation in the affected environment under the no action alternative. Vegetation would continue to be exposed to damage from un-managed vehicle use throughout the Management Area and the zone of influence. A small segment of the unusual plant assemblage of Western Mojave Desert Mojave Saltbush in the north-east portion of the zone of influence would continue to be exposed to continued route proliferation.

Approximately a dozen Joshua trees a year will continue to be burned down and shot. Residents of nearby communities will dig up and remove numerous cactus plants for transplanting to their residences. Existing roads and trails will continue to widen as OHV riders seek a smoother course of travel. Camping and parking activities will result in additional dirt clearings with a loss of vegetation. All these actions will result in an acceleration of soil erosion.

There will be no facilities or permitted events, therefore there will be no impacts from these activities.

In the long-term, leaving the approximately 12,000 acres of land proposed for acquisition in private ownership will allow development to occur and will lead to the loss of most, if not all, native vegetation. Existing public land will remain available for disposal, and will most likely be traded for private lands in other areas through the Western Mojave Land Tenure Adjustment Project. The end result will probably be commercial and/or residential development, and the subsequent loss of all native vegetation in the affected environment.

Wildlife

Wildlife will experience a major negative impact under the no action alternative. In the short-term, impacts will be caused by unmanaged OHV play throughout the affected environment. In the long-term, impacts would result from the disposal of public land, and the eventual development of the land for either commercial, industrial, or residential uses.

All impacts to wildlife, as stated in the proposed action, will occur with two exceptions. First, any existing populations of Mohave ground squirrel will go undetected; therefore, if they do exist they probably will not receive appropriate levels of management. Second, habitat for desert tortoise will continue to be impacted by OHV play until the entire area is closed to all OHV use. Inventories will not be conducted in the near future on the land within the Management Area. Eventually inventories will be

conducted on the parcels of private land as they are developed, and on the public lands as they are disposed.

The entire affected environment is Category III (interim) habitat and will not be managed for viable populations of desert tortoise. The final outcome as to how desert tortoise will be managed on the existing public land within the affected environment will be dependent upon the habitat management plan for the western Mojave desert tortoise population.

Continued shooting in the affected environment will result in the loss of numerous individual animals. The two existing guzzlers will go un-repaired, and no new guzzlers will be constructed. Development on private land within the affected environment will destroy native wildlife habitat and eliminate sites for foraging, food, and shelter.

In the long-term, assuming that all opportunities for OHV play and non-motorized recreation are forgone in the affected environment, wildlife will experience a major negative impact. The public land will be made available for disposal or exchange as per the *CDCA Plan*. In all likelihood, the area will be developed for subdivisions or industry. Little if any native wildlife habitat will remain.

Minerals

The no action alternative will have a minor negative impact on the availability of minerals within the affected environment. Minerals will remain available on public land until such time as the land (and minerals) is disposed or exchanged as per the *CDCA Plan*.

Cultural

The no action alternative will have a minor negative impact on cultural resources within the affected environment. No action means no wide-scale inventory to locate potential sites, and no protective measures to stabilize known existing sites. In the short-term, cultural sites that have been identified will most likely not receive the appropriate management they require. Potential long-term, loss and impacts will continue.

In the long-term, the BLM is required to inventory for, and to protect, cultural resources on public land prior to any actions, including disposal. However, the known sites are not considered significant, and therefore it is unlikely they will require mitigation prior to disposal of the land. It is not probable that the private land in the area will be inventoried, or that potential impacts to sites on private property will be mitigated. There will be no efforts to interpret potential cultural sites located.

Visual

The visual resources in the affected environment will receive a negligible impact under the no action alternative.

In the short-term, unmanaged OHV play will continue throughout the affected environment. This will result in additional trails and routes of travel that interrupt the landscape. In the long-term, assuming disposal or exchange of all public land, the existing open space would be lost to residential and commercial development.

Air Quality

The no action alternative will overall have a minor negative impact on the air quality. In the short-term, OHV play will cause similar impacts as the proposed action. In the long-term, all recreation opportunities will be forgone. As development occurs there will be a net deterioration of the air quality due to pollutants from commercial, industrial, and residential sources.

Noise

In the short-term, noise from activities on the lakebed will continue to create a minor negative impact. Use of aircraft could go unrestricted resulting in no control of noise impacts to adjacent residents. In the long-term, noise impacts from activities within the Management Area would diminish as the activities cease to occur.

Hydrology

The no action alternative will have a minor negative impact on water resources. In the short-term, the existing situation will remain unchanged. In the long-term, residential and commercial development will result in a minor negative impact on domestic water supplies.

There would be an increased demand for water to meet additional household, landscaping, and commercial needs. There would be increased amounts of solid and sewage waste requiring disposal, potentially increasing the threat of groundwater contamination. Increased development in the surrounding area would also lead to additional run-off that would flood the lakebed on a more regular basis. The use of the lakebed for the retention of rain runoff could possibly be an acceptable use.

Geology

The no action alternative will have a net moderate negative impact to the soils in the affected environment, similar to the impacts in the proposed action. In the short-term, off highway vehicle use

will continue to compact some soils and break up others. In the long-term, the soils will be disturbed from construction activities associated with residential and commercial development.

Impacts to the lakebed will be minor in the no action alternative. All existing uses and associated impacts will cease on the lakebed with the elimination of the recreation opportunities. The lakebed will most likely be used as a storage site for rain runoff water. The invasion of plants and the formation of mounds will continue.

Wilderness and Areas of Critical Environmental Concern

There are no wilderness study areas or areas of critical environmental concern within, or adjacent to, the affected environment.

2. Resource Uses

Recreation

The no action alternative will have a major negative impact on recreation in the affected environment. Not implementing the Management Plan (taking no action) would eventually preclude all recreation opportunities in the El Mirage and Shadow Mountain area.

In the short-term, existing recreation opportunities will continue to be available on the existing 1,250 acres of public land on the lakebed. Other tracts of public land in the area would be managed under guidelines in the *CDCA Plan* consistent with unclassified land. Off-highway vehicle play would not be allowed, and motor vehicle use would be restricted to existing routes of travel. Trespass on private land would most likely continue.

In the long-term, there will be a concerted effort by the local communities to close the area to OHV use. Local residents have been demanding a solution to the present problems for several years. Furthermore, the current pattern of subdivision and zoning of the land into small tracts indicates future higher density residential development. Residential development around the lakebed will not be compatible with the existing recreational uses. Without the acquisition of private land on and around the lakebed, existing recreational uses will be displaced as private land is developed, and as public land in the area is disposed.

In response to an anticipated public demand to close the area to OHV use the vehicle access designation will be closed on all public land on the lakebed and in the Shadow Mountains. This land will be disposed as the practical way to resolve the trespass issue.

Closing the El Mirage and Shadow Mountain area would displace approximately 110,000 visitors per year. Trying to focus this displaced OHV use into other legal designated riding areas will be a major task. There will be an increase in OHV related trespass in areas that are not designated for OHV play. Some of the displaced visitors will relocate to other areas in the Victor Valley and will cause the same type of recreation related problems that are present at El Mirage.

Recreation activities other than OHV play would also be negatively impacted. The lakebed serves as the setting for the recreational use of ultra-light aircraft, landsailors, model airplanes, and vehicle land speed trials. These activities require large open space and a hard packed surface. There are few alternative sites available in southern California that are capable of providing the opportunities found at El Mirage.

In the no action alternative there will be a negligible effect on the activities of hunting and the shooting of shotguns. Both will be allowed to continue. This will benefit visitors who engage in these activities. The shooting will adversely affect all other visitors to the area. Gunfire by its very nature tends to disturb most visitors. They do not know who is shooting, what they are shooting, what they are shooting for, or what they are shooting at. Furthermore, visitors and local residents will be at risk of being struck by a bullet from unsafe shooting practices.

Mining and Grazing

Mining and grazing activities will receive a moderate negative impact under the no action alternative. Opportunities for mining and grazing would be foregone as the public lands are made available for disposal or exchange as per the *CDCA Plan*.

Authorized Activities

Opportunities for authorized activities will have a major negative impact in the no action alternative. In the short-term, commercial filming will continue on the lakebed until development on surrounding private lands will diminish the value of the location. Military, recreation, and commercial activities will be limited to the lakebed until such time as the public land is disposed.

In the long-term, impacts to authorized activities would be similar to the impacts to recreation. All opportunities would be foregone with disposal of the public land on and around the lakebed.

3. Social and Economic Factors

Land Tenure

The no action alternative will have a net minor negative impact on the lands in the affected environment. Approximately 12,400 acres of public land will be available for exchange. In the short-term, landowners will have to resolve the trespass issue on their own. Eventually, the area will be developed by private interests and all existing recreation related uses will be displaced.

In the long-term, the disposal of public land in the El Mirage and Shadow Mountain area will provide additional land to the local tax base. Once the land is privately developed El Mirage would realize a minor positive benefit from additional tax revenue. Conversely, the loss of opportunities for visitor related businesses would be a moderate negative impact. Upon full development the Management Area will have the capacity for several hundred thousand visitors each year, with the potential for generating thousands of dollars in local revenue from recreation related services.

Local Communities

The local communities will receive a moderate negative impact under the no action alternative. The proposed action is in direct response to resolving the recreation related issues confronting the local communities. In the short-term, taking no action will not resolve these issues. The solutions to such issues as trespass, littering, and vandalism would again be the responsibility of local residents and the County Sheriff.

In the long-term, there will be additional negative impacts. Many of the residents who live in the local communities engage in recreation activities within the Management Area. Instead of a 5 or 10 minute drive these people would have to travel for at least forty minutes to the next nearest OHV play area. Furthermore, there would be the loss of a large undeveloped open space which currently generates feelings of a rural atmosphere.

Emergency Services

The no action alternative will have a moderate negative impact on the existing level of emergency services in the affected environment. In the short-term, BLM's presence in the affected environment will be directed toward closing all public land to OHV play.

In the long-term, funds would no longer be available for the three BLM law enforcement rangers assigned to the Management Area. The local communities would continue to be responsible for providing emergency services throughout the affected environment.

V. CUMULATIVE IMPACTS

In this section the impacts are reviewed in the context of what would result from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions.

The geographic area of analysis varies from resource to resource. The general area of the analysis is the eastern Antelope Valley and the entire Victor Valley. The cumulative impacts are based on the likely outcome of the scenarios developed for the proposed action and the no action alternatives.

A. Historical Impacts

The natural resources within the Management Area have already been impacted from over one hundred years of human occupation. The original town of El Mirage (complete with a post office and school) was located on the north side of the lakebed at the turn of the century, in the heart of the proposed Management Area. Historical uses within the Management Area include: a large cattle ranch; a glass manufacturing plant; an experimental rice field on the lakebed; an oil well north of the lakebed; approximately 12 recent (within the last 20 years) permanent residents - including one with an airfield; numerous miles of roads and flood control channels (constructed in preparation for residential development); and over 100 mines and exploratory pits.

For the last thirty years the proposed Management Area has received intensive recreation and commercial use. These uses have gone unmanaged, leading to unacceptable impacts to the environment. There have been impacts to the vegetation, wildlife, and soil from OHV play, camping, shooting, product testing, filming, competitive events, grazing, military exercises, utility corridors, and non-motorized recreation activities. For the most part these activities have occurred on both private and public land with little or no restrictions.

B. Proposed Action Alternative

1. Natural Resource Values

Climate and Topography

There will be no cumulative impacts to either the climate or the topography as a result of the proposed action.

Vegetation

Implementation of the proposed action will have a significant positive effect on the cumulative impacts to vegetation. The Management Area will contribute to the impacts on vegetation in both a negative and positive manner. Confining OHV play within the Management Area will intensify the impacts to the vegetation. There would be more crushing and up-rooting of vegetation associated with motorized vehicle recreation. But on the positive side, in the zone of influence outside the Management Area there would be reduced impacts on the public land where the vehicle access is either closed or restricted to designated routes of travel. Impacts to vegetation on private land within the zone of influence would also be reduced as OHV related trespass on private land is eliminated.

Development trends throughout the Antelope and Victor Valley are increasingly displacing native vegetation. It is feasible, and likely, that the private land surrounding the Management Area will be developed for residential, agricultural, and commercial uses. As this occurs there will be less open space available where native vegetation may exist. Creation of the Management Area would offset this to some degree by maintaining open space. Even though OHV recreation would be allowed here, this is a less destructive activity to native vegetation than urbanization.

The proposed action is consistent with guidelines in the *CDCA Plan* in regards to protecting the Western Mojave Desert Mojave Saltbush Assemblage. There will be no cumulative impact to this unusual plant assemblage in the northeast corner of the zone of influence.

Wildlife

There will be significant positive results for wildlife from the cumulative impacts of the proposed action. Parallel to the impacts occurring to vegetation, development throughout the high desert is displacing wildlife habitat at a rapid pace. Expanding communities, highway improvements, utility corridors, military reservations, and mining operations are all combining to create significant cumulative impacts to wildlife.

The proposed action is in part a response to the cumulative impacts affecting the ecosystem and the natural habitat of wildlife. The Management Plan calls for restricting and confining OHV play from 100,000 acres to 24,400 acres in the El Mirage area. The desert wide goal is to locate all OHV play into such managed OHV recreation areas. It is anticipated that these actions will have a positive contribution to the cumulative impacts affecting wildlife.

Full development of the Management Area will not jeopardize the continued existence of the desert tortoise. Regardless of the decision to implement the proposed action or the no action alternative, future development and management of the land in the El Mirage area will not be compatible with management of the tortoise. There are too many existing impacts in this area to maintain viable populations.

The area is classified as Category III (interim) desert tortoise habitat in recognition of the existing impacts. Such impacts include: residential, commercial, and agricultural development; a large percentage of private land intermingled with public land; and degradation of the existing habitat from OHV play, highways, and the construction of transmission lines.

The actions contained in the Management Plan represent an attempt to provide reasonable mitigation for the tortoise, and to minimize the number of decisions regarding tortoise management that are in fact deferred to a later date. The El Mirage Cooperative Management Area is just one piece of the puzzle regarding sound and efficient management of both the desert tortoise and off-highway vehicle play in the California Desert Conservation Area.

The Management Area is consistent with the goals and objectives of the Western Mojave Land Tenure Adjustment (LTA) Project. The primary goal of the LTA project is the consolidation of scattered and segmented tracts of public land into large manageable blocks. As a result of this consolidation, BLM will be better able to manage natural resources and the Air Force will be better able to manage and utilize the airspace. The LTA Project will in part utilize public land surrounding the Management Area as an exchange base for the consolidation of public land within Category I and II tortoise habitat. This will also assist with the goal of establishing quality tortoise habitat.

Currently, BLM is in the process of preparing a habitat management plan for the western Mohave desert tortoise population. The habitat management plan will provide overall direction for management of desert tortoise throughout the CDCA, including OHV play areas. Upon completion of the habitat management plan, BLM will review the tortoise mitigation for the El Mirage Cooperative Management Area to assure appropriateness, compatibility, and consistency. There is the potential for changing the mitigation package based upon new information contained in the habitat management plan. If this is the case, the USFWS will be involved informally, and formal consultation will be reinitiated if appropriate.

Minerals

The proposed action will preclude any cumulative impacts to mineral resources. There are several minerals present within the affected environment that may some day be economically feasible to remove. The proposed action will ensure the availability of these resources. This will have a positive benefit on the availability of minerals in the high desert when reviewing the cumulative impacts of other developments. There is increasing pressure to set aside large blocks of land for wilderness, the military is attempting to acquire more land, and there is an ever increasing spread of urban development. The combined affects of these actions are reducing the availability of minerals on large blocks of land.

Cultural

The proposed action will preclude any cumulative impacts to cultural resources. There will be a representative sampling of the Management Area to locate potential cultural resources. All sites located will be appropriately inventoried, recorded, and protected. Sites located on public land that is retained within the zone of influence will be protected through vehicle closures, or the designation of open and closed routes.

Visual

There will be an insignificant cumulative impact on the visual values within the Victor Valley from the proposed action. One beneficial impact of creating the Management Area would be the preservation of open space. Conversely, there would be trail proliferation and the subsequent scarring of hillsides from OHV play.

Air Quality

The recreational activity proposed for the Management Area will constitute an insignificant cumulative impact on the air quality of the high desert. Urban growth with the associated dust from construction, auto travel, and the Yermo Cogeneration Plan represent the most significant sources of regional cumulative impacts. These sources are dominated by the impact of polluted air that rises out of the Los Angeles basin and flows into the high desert.

Noise

The Management Area will not contribute to the cumulative impacts on noise. Vehicles and activities within the Management Area will be patrolled to enforce noise standards as set forth in the California Vehicle Code. The area is large enough to provide opportunities for quiet and solitude.

Hydrology

Activities within the Management Area will not affect subsurface water flows. There will be a slight increase in surface runoff within the Management Area due to a loss of vegetation. This will not contribute significantly to the cumulative impacts on the hydrology of the high desert.

The lakebed would not be available for the storage of rain runoff, and this would affect the regional development of a flood control system. There would be the need to coordinated with the county for flood control plans for south of the Management Area. The focus of such coordination should be on assessing alternative means for disposing of rain run-off. This could include on site retention, the routing of run-off to east of the lakebed, or the development of catch and retention basins.

Geology

The soils within the Management Area will not be irreversibly damaged. As a result, the proposed action will have an insignificant cumulative impact on desert soils.

Within the Management Area the intense use of OHVs will degrade the soils and result in trail proliferation. Other large projects that will add to soil surface disturbances in the high desert include proposed upgrades and widening to Highways 395 and 58, Spangler Hills, Stoddard and Johnson Valley OHV recreation areas, Twenty Nine Palms Marine Base, Luz solar power plant, continued use and expansion of the National Training Center, utility corridors, dispersed recreation, and the expansion of urban developments.

Wilderness and Areas of Critical Environmental Concern

Implementation of the Management Plan will have an insignificant impact on wilderness and areas of critical environmental concerns. On a desert-wide basis implementation of the proposed action should contribute to a reduction of the cumulative impacts to wilderness areas. Development of the Management Area will provide OHV enthusiast with a legal place to ride. Confining such play within the Management Area will also provide opportunities to educate visitors in the respectful use of public lands. This will be accomplished through the dissemination of information at controlled access points.

2. Resource Uses

Recreation

Development of the Management Area will significantly contribute to the opportunities for recreation in the CDCA. Recreation

accounts for the largest use within the Management Area and the use of OHVs is the major activity. This trend will continue with implementation of the proposed action. The Management Area is intended to resolve conflicts between existing uses, and the local communities and landowners. The intent behind the proposed action is to establish an area where all existing activities can continue to occur.

It is anticipated that between 3,000 and 4,000 visitors will be displaced upon implementation of the proposed action. These visitors will be displaced from staging areas located outside the perimeter of the Management Area. It is estimated that approximately 30,000 visitors have already been displaced. Most of these visitors no longer visit the area due to the increase in BLM patrols and law enforcement. Much of this use has transferred to other OHV recreation areas, but some of it has also relocated on private and public lands not intended to support this use.

Vehicle access is either being closed or limited on public land within the zone of influence to prevent displaced OHV play from re-locating to here. The Law Enforcement Rangers assigned to the Management Area will assist the local law enforcement agencies with enforcing trespass laws in the zone of influence around the Management Area. As a result there should be minimal cumulative impacts from displaced recreation visitors.

There will be no cumulative impact to hunting or the shooting of shotguns for recreation. There are thousands of acres of public land available for these uses throughout the high desert. There are also several private facilities available in southern California that provide opportunities for shooting shotguns.

Mining and Grazing

Mining and grazing will both be allowed to continue within the Management Area. Therefore there will be no cumulative impact to these activities.

Authorized Activities

The cumulative effect of allowing authorized activities to occur within the Management Area is significant and beneficial overall. The nearby megalopolis of Los Angeles is approaching 15 million people. The local Victor Valley is expected to double in population within the next 5 to 10 years. A growing business base requires outdoor opportunities for research and development. The close proximity to Los Angeles and the variety of terrain at the Management Area provide an excellent combination that attracts numerous businesses. Which in turn provides jobs and generates tax revenue.

Three of the major OHV manufactures have obtained land use permits for product testing and development at El Mirage. Several other permits have been issued for similar types of activity. The Management Area also provides valuable opportunities for commercial filming. The average television commercial cost approximately \$125,000, and dozens of these are filmed on the dry lakebed each year. There are also several television series which shoot at the lakebed, and the average cost of filming one episode is \$750,000 to \$1.2 million. Filming companies spend money locally on hotels, gas, equipment rental, hardware supplies, and labor. In 1988 commercial filming companies spent over \$600,000 dollars throughout the Antelope Valley in association with filming projects.

3. Social and Economic Factors

Land Tenure

Consolidation of the land into public ownership within the Management Area will have a significant and beneficial cumulative impact on the Antelope and Victor Valleys.

Implementation of the proposed action will result in a land status pattern that is practical and manageable. Land within the Management Area will be consolidated in public ownership, and the scattered tracts of public land around the Management Area will be disposed. This would maintain large open space for recreation use.

The creation of legal OHV play areas within the high desert will provide riders with the opportunities they need to engage in their sport. This would assist law enforcement agencies in reducing OHV related trespass in a large geographical region stretching from Los Angeles to the Victor Valley.

Local Communities

Establishing the Management Area will resolve several long standing issues concerning trespass and OHV play, and will therefore have a significant impact on the local communities. Cumulative impacts associated with OHV play in the local communities will be greatly reduced.

The Management Area will create business opportunities and should provide a boost to the economy in general. Land acquired in federal ownership will displace some of the tax base of the local community. This could be replaced through revenue generated from salaries and taxes on local businesses that serve the visitors. The net benefit of the Management Area would be to bring visitor dollars into the local community.

The visitors engaging in recreation activities at El Mirage will spend thousands of dollars on recreation equipment each year.

There will be an increased need for such items as motorhomes, OHVs, camping equipment, kites, race car parts, ice, soda, food, and gas.

Emergency Services

There will be an insignificant cumulative impact on the emergency services in the Antelope and Victor Valleys. The proposed action will provide emergency services to assist with resolving long standing issues concerning law enforcement and first aid. This will benefit residents and visitors throughout San Bernardino County. By providing these services within the Management Area there would be a reduced need to pull in emergency equipment and personnel from other areas.

4. *Summary*

The Management Area is a heavily impacted area. There is a long history of human occupation, use, and development of this area. Implementation of the proposed action is intended to resolve some of the conflicts concerning land use in the area. The Management Area would establish permanent opportunities for visitors to engage in recreation activities, and would resolve the long standing problems associated with such use. Implementation of the Management Plan would result in a reduction of resource related impacts. The public land within the zone of influence that is disposed would most likely be developed.

The most reasonable foreseeable scenario that can be presented given: 1) the historical use of the Management Area; 2) the present trends in land use; and 3) the projected future development of the area, is that implementation of the proposed action would create an open space for recreation and commercial uses surrounded by urban development. Land development in the Antelope and Victor Valleys is proceeding at a very rapid pace. The Management Area is rapidly being surrounded by such development. To the south is the community of El Mirage, to the west is L.A. county and rural development, to the north is the community of Shadow Mountain Village and Edwards Air Force Base, to the east is the community of Adelanto and Highway 395.

C. Alternative B, No Action

1. *Natural Resource Values*

Climate and Topography

There will be no cumulative impacts to the climate or the topography as a result of the no action alternative.

Vegetation

The no action alternative will have a significant contribution to the cumulative impacts on the vegetation in the Antelope and Victor Valleys. The immediate cumulative impact to the vegetation in the no action alternative will be the continued unrestricted use of OHVs on approximately 100,000 acres of public and private land. This will result in widespread trail proliferation, and the crushing and uprooting of plants as a result of impacts from vehicles. In the long-term, not acquiring and blocking-in the Management Area under federal ownership, and leaving the public land available for disposal, would most likely result in the eventual development of the land. In this case most, if not all, of the native vegetation would be removed. This would occur on private land throughout the Antelope and Victor Valleys.

Throughout the high desert native vegetation will still be preserved in large tracts at Edwards Air Force Base, at Fort Irwin, at Stoddard and Johnson Valley OHV recreation areas, on public retained through the LTA Project, at Joshua Tree National Park, at county and state parks, and on large tracts of the National Forest south of the Management Area. In addition, large tracts of desert land will be retained in federal stewardship and managed by the BLM for limited use. This includes wilderness areas, areas of critical environmental concern, and tracts where vehicle access is limited to preserve a variety of natural resource values.

Land within the zone of influence that contains the Western Mojave Desert Mojave Saltbush plant assemblage will be managed according to guidelines in the *CDCA Plan*. The no action alternative will have no cumulative impact on this unusual plant assemblage in the northeast corner of the zone of influence.

Wildlife

The impacts to wildlife will parallel the impacts to vegetation in the area. The cumulative impact of the no action alternative will be significant and will involve the continued loss of habitat throughout the Antelope and Victor Valleys. This would occur from expanding urban development. Increased development in the El Mirage/Shadow Mountain region would eventually lead to the displacement of the current OHV play. This use would relocate in a variety of areas, and would most likely result in impacts to wildlife on public and private lands where OHV play is not authorized.

If all the existing use was successfully relocated to other OHV recreation areas, the impact of adding 110,000 visitors to the other OHV play areas would be significant. This will further degrade the quality of the ecosystems in these other areas resulting in the loss of habitat and impacts to the wildlife.

Minerals

There will be a significant impact to the availability of minerals in the no action alternative. The impact of the no action alternative will be a reduction in the availability of minerals within the Antelope and Victor Valleys. There will be the loss of potential mineral resources at the lakebed and within the Shadow Mountains if the land is disposed.

Cultural

The cumulative impact to cultural resources under the no action alternative will be significant. Potential cultural sites in the El Mirage/Shadow Mountain area have been heavily impacted from exposure to intensive OHV play. Only during the disposal process would sites likely be identified, surveyed, and protected if appropriate. On private land sites would continue to remain vulnerable to loss through development. The cumulative impact will most likely be the loss of additional cultural sites within the Victor Valley.

Visual

There will be a significant cumulative impact on the visual values of the western Victor Valley under the no action alternative. The outcome will most likely be the development of the Management Area for residential, agricultural, and commercial uses. This would result in the cumulative impact of a loss of one of the largest existing open spaces in the western Victor Valley.

Air Quality

The cumulative impact from the no action alternative will be insignificant in the short-term. In the long-term, the impact will increase significantly with an increase in auto emissions. There will be a gradual increase in dust from private lands associated with development. This would eventually be reduced as the land is landscaped and paved, unless there was agricultural development (unlikely given the slope of the land).

Noise

The cumulative impact for noise in the no action alternative will be dependent on how the land is zoned and what uses are eventually allowed. In the short-term, the residents of the local communities will be impacted from the noise associated with OHVs that will continue to operate in trespass, and from small aircraft that will utilize the lakebed. In the long-term, noise associated with industry could increase if the private land is developed for this purpose.

Hydrology

There will be no cumulative impact on the hydrology of the region in the no action alternative. Any uses for the land in the affected environment which involve development will increase runoff and the need for drainage management. In the no action alternative the lakebed would be available for the storage of rain runoff water. This would simplify the design and development of a flood control system and would benefit the region as a whole.

Geology

The soils will realize an insignificant cumulative impact under the no action alternative. The cumulative impact of the no action alternative will consist of disturbance of soils in one more area within the Victor Valley by urban development. Most all soils in the affected environment on less than a 20% slope will be disturbed by either residential, commercial, or agricultural development.

The existing uses will cause accelerated erosion in the short-term, but will not result in any irreparable impacts. In the long-term, some of the developments will probably result in compaction or relocation of the soils, leading to long-term impacts.

Wilderness and Areas of Critical Environmental Concern

There will be no significant cumulative impacts on wilderness areas or areas of critical environmental concern in the no action alternative. It is reasonable to expect that some of the displaced OHV use will relocate in sensitive areas where no OHV play should occur, such as wilderness areas or areas of critical environmental concern. However, such sensitive areas are a considerable distance from El Mirage. It is anticipated that the majority of OHV play will relocate in other legal OHV play areas, and in areas closer to population centers, possibly on the outskirts of Victorville and Apple Valley.

2. Resource Uses

Recreation

There would be significant negative cumulative impacts to recreation opportunities in the no action alternative, especially OHV play. None of the current recreation uses on or around the lakebed will be allowed to continue. In southern California many historic OHV play areas have been closed in recent years, and much of this use has relocated to El Mirage. Such historical use areas that have been closed to OHV recreation include: Devore, the foothills around Rancho Cucamonga and San Bernardino, Windy Point, Summit and Honda Valleys, and all of Los Angeles and Riverside Counties.

There will be several undesirable effects if the no action alternative is implemented. Many of the residents of the Antelope and Victor Valleys engage in OHV recreation. If the El Mirage-Shadow Mountain area is closed to this use some of these people will be more inclined to ride in local spots where OHV play is not intended, rather than load-up the vehicles and drive an additional hour to the next closest OHV recreation area. This will result in increased trespass throughout southern California, and will place additional demands on local law enforcement agencies.

Hunting and the shooting of shotguns will not be impacted by the no action alternative. Both these activities will be allowed to continue.

Mining and Grazing

The no action alternative will have a significant cumulative impact on mining and grazing. The impact will be an increase in the loss of mining and grazing opportunities throughout the Antelope and Victor Valleys. As public land in the Management Area and the zone of influence are disposed they will be susceptible to development. This could preclude opportunities for mining and grazing. There is a rapidly increasing loss of land available for these two activities in the high desert. Military reservations, wilderness, and urban development all are expanding and they preclude mining and grazing.

Authorized Activities

Authorized activities will experience a significant cumulative impact as a result of the no action alternative. Similar to mining and grazing, suitable places for these types of activities to occur are becoming fewer and fewer. The cumulative effect will be a reduction in the amount of commercial filming, product testing, and research and development that occur within the Victor Valley. There would be an associated decline in the amount of funds spent locally to support these activities.

3. Social and Economic Factors

Land Tenure

There will be an insignificant cumulative impact on the land tenure as a result of the no action alternative. Public land in the El Mirage/Shadow Mountain area will remain available for disposal as identified by the *CDCA Plan*. The lakebed would also eventually be classified for disposal. This land will most likely be used as part of an exchange base for the LTA Project. The end result will be the disposal of small tracts of public land, and the consolidation of public land into large manageable blocks. The difference between the proposed action and no action alternative

is that land in the Management Area (proposed action) would be identified for OHV play, while public land consolidated in the LTA Project (no action) would probably be closed to OHV play.

Local Communities

There will be a significant impact on the local communities under the no action alternative. The cumulative impact of the no action alternative will be a continuation of the existing situation with OHV trespass, trash, vandalism, and other impacts associated with uncontrolled recreation use of the area. The law enforcement agencies responsible for the area presently do not have sufficient resources to control these problems.

The community of El Mirage would not realize any negative impacts to it's tax base. There would be no loss to the tax base because private land would not be placed into Federal ownership as a result of land acquisition. Business opportunities for providing goods and services to visitors would be precluded, but not business opportunities in general.

Emergency Services

There will be an insignificant cumulative impact to emergency services in the area under the no action alternative. Fewer emergency services will be available, however, the demand for these services will also be less as a result of closing the area for recreational use. The need for emergency services in relation to recreation will be replaced by the need for emergency services in relation to urban development. The changing need for emergency services would be the responsibility of local and county government.

4. *Summary*

There are going to be cumulative impacts to the El Mirage/Shadow Mountain area regardless of what action is taken. This area is on the peripheral of one of the largest population centers in the nation. The most reasonable foreseeable scenario for this area is that in the no action alternative the existing private land would be allowed to develop along with the Antelope and Victor Valleys. The scattered tracts of public land would be exchanged and developed. Most all the natural vegetation and wildlife would be destroyed.

In this scenario it would not be possible to retain and manage the lakebed for recreation. The majority of visitors that use the lakebed engage in OHV recreation. It is likely that much of the existing use would be displaced into other areas. The OHV play that does not relocate to other legal riding areas would result in continued trespass, OHV trail proliferation, littering, and the

general degradation of the natural systems. These impacts would be most intense within the Victor Valley, but would also be felt throughout the high desert as visitors seek new areas for OHV play.

VI. IRREVERSIBLE OR IRRETRIEVABLE COMMITMENT OF RESOURCES

Implementation of the proposed action, the *Management Plan for the El Mirage Cooperative Management Area*, will not result in the significant irreversible or irretrievable commitment of resources.

Taking no action will allow existing public land to be exchanged for private land in other areas. In addition, development could occur on the private land in the affected environment that is proposed for acquisition. While these actions will be reversible, the probable outcome is that these lands will never be available for public use, but rather will be developed for private gain.

VII. MITIGATION AND MONITORING

A. Mitigation

The proposed action includes numerous management actions which are designed to mitigate all impacts to acceptable levels. Full development of the El Mirage Cooperative Management Area will have an overall net positive impact on the affected environment. Therefore, there are no additional mitigating measures required.

B. Monitoring

A comprehensive monitoring plan has been developed for the affected environment and is located in the monitoring section of the Management Plan, section III-G.

VIII LIST OF PREPARERS

A complete list of the persons, clubs, and agencies that assisted with the preparation of this environmental assessment may be found in Section V of the Management Plan, List of Preparers.

IX CONSULTATION AND COORDINATION

A complete list of the persons, clubs, and agencies that contributed to, or that were involved through consultation and coordination with the assimilation of this document may be found in Section V of the Management Plan, Parties Consulted.

8340 (El Mirage)
1791 (CA 068.52)
CA 068-0-7

X FINDING OF NO SIGNIFICANT IMPACTS

The environmental impacts of the proposed action have been addressed. On the basis of this environmental assessment, it has been determined that, after mitigation, there will be no significant impacts resulting from the implementation of the proposed action. Therefore, preparation of an Environmental Impact Statement pursuant to Section 102(2)(c) of the National Environmental Policy Act of 1969 is not required.

Recommended by :

Sharon Paris

Environmental Coordinator,
Barstow Resource Area
Bureau of Land Management

1-19-90

Date

Approved by:

Alden Sievers

Area Manager,
Barstow Resource Area
Bureau of Land Management

1/19/90

Date

NOTIFICATION OF THE NATIONAL ENVIRONMENTAL POLICY ACT OF 1969
LA 628-707

The following information is being provided to you for your information and to allow you to make a decision on whether or not you wish to proceed with the proposed action. The information is being provided to you for your information and to allow you to make a decision on whether or not you wish to proceed with the proposed action.

The environmental impacts of the proposed action have been addressed. On the basis of this environmental assessment, it has been determined that, after mitigation, there will be no significant impacts resulting from the implementation of the proposed action. Therefore, preparation of an Environmental Impact Statement pursuant to Section 102-2(f) of the National Environmental Policy Act of 1969 is not required.

Recommended by:

[Signature]
Environmental Coordinator
Forest Resource Area
Bureau of Land Management

Approved by:

[Signature]
Area Manager
Forest Resource Area
Bureau of Land Management

[Signature]
Date

[Signature]
Date

